Exhibit 9

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REMOTE VIDEO DEPOSITION OF DR. DONALD TURNBULL FRIDAY, AUGUST 30, 2024 9:00 A.M. PDT

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Reported by: JULIE RUMSEY, CSR 14144

Job No. 102656 PAGES 1 - 131

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THE UNITED STATES DISTRICT COURT
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           FOR THE EASTERN DISTRICT OF TEXAS
               MARSHALL DIVISION
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   HEADWATER RESEARCH LLC,
                                        )Case No.
                      )2:23-CV-00379-JRG-RSP
           Plaintiff.
                         )(Lead Case)
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   T-MOBILE USA, INC. and SPRINT
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   CORP.,
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          Defendants.
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       REMOTE VIDEO DEPOSITION OF DR. DONALD TURNBULL,
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    located in Vancouver, British Columbia, commencing at
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    9:01 A.M. PDT on Friday, August 30, 2024, before JULIE
19
    RUMSEY, Certified Shorthand Reporter 14144, in and for the
    State of California.
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16	ALSO PRESENT:
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1	FRIDAY, AUGUST 30, 2024, 9:01 A.M. PDT
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3	THE VIDEOGRAPHER: We are on the record. This is
4	the beginning of media number 1 in the deposition of Donald
5	Turnbull in the matter of in the matters of Headwater
6	Research, LLC, versus T-Mobile Incorporated, et al., as
7	well as Headwater Research, LLC, versus Cellco Partnership
8	d/b/a Verizon Wireless and Verizon Corporate Services
9	Group, Incorporated.
10	This deposition is being taken remotely on
11	August 30th, 2024. The court reporter today is Julie
12	Rumsey. I'm Koryn Coalson, the videographer, on behalf of
13	First Legal Depositions, located in Los Angeles,
14	California. This deposition is being videotaped at all
15	times unless specified to go off the record.
16	Would all present please identify themselves,
17	starting with our noticing attorney.
18	ATTORNEY VINCENT: Philip, you're muted.
19	ATTORNEY WANG: Sorry. I was muted.
20	This is Philip Wang of the law firm Russ, August &
21	Kabat representing Plaintiff, Headwater Research, LLC.
22	ATTORNEY VINCENT: Robert Vincent from Gibson Dunn
23	on behalf of the witness and the defendants.
24	THE VIDEOGRAPHER: Sorry.
25	ATTORNEY ZHANG: Yi Zhang with Hogan Lovetts. I'm

1	representing Google, LLC.
2	THE VIDEOGRAPHER: Okay. Really quickly, before
3	we go on. Mr. Turnbull, I've spotted spotlit you for my
4	video. If you could leave that on and click view and click
5	gallery if you want to see everybody. Thank you.
6	Would the court reporter please swear in our
7	witness.
8	CERTIFIED STENOGRAPHER: Good morning. My name is
9	Julie Rumsey, California Certified Shorthand Reporter
10	Number 14144. The stenographic record is the official
11	record pursuant to C.C.P. 2025.
12	Before we proceed, I will ask counsel to agree on
13	the record that there is no objection to this deposition
14	officer administering a binding oath to a witness not
15	appearing personally before me, located in Vancouver,
16	British Columbia.
17	ATTORNEY VINCENT: No objection from Plaintiff
18	Headwater.
19	ATTORNEY WANG: No objection from Defendants.
20	000
21	DR. DONALD TURNBULL,
22	called as a witness herein, having been
23	administered an oath remotely in accordance with C.C.P.
24	Section 2096, was examined and testified as follows:
25	000

- 2 BY ATTORNEY WANG:
- 3 Q. Good morning, Dr. Turnbull.
- 4 A. Hi, there.
- 5 Q. We have met before. Correct?
- 6 A. I think -- yes.
- 7 Q. I'm getting a feeling of deja vu. It was not too
- 8 long ago where we had another deposition, correct?
- 9 A. I don't remember how long ago, but, yes, that
- 10 seems familiar.
- 11 Q. So as I mentioned before, I represent the
- 12 plaintiff, Headwater Research, LLC, in these cases. And I
- 13 will just note for the record that these are cases in the
- 14 Eastern District of Texas with the numbers 2:23-CV-00379
- 15 and -352, with -- for the same numbers.
- Does that sound right to you?
- 17 A. That -- that probably is correct. Yes.
- 18 Q. Do you understand that you are under oath today?
- 19 A. Oh, yes.
- 20 Q. How many times have you testified under oath
- 21 before?
- 22 A. Oh, gosh. I would think close to 50 times,
- 23 whether it's depositions or trial or in-court appearances.
- 24 Q. Do you understand that, even though we're on Zoom
- 25 today, that the testimony you give under oath here is

- 1 subject to the same penalty of perjury as if you were
- 2 testing -- testifying in a court of law?
- 3 A. Oh, sure. Yes.
- 4 Q. I'm going to assume that you understand the
- 5 questions I ask you unless you tell me that you don't
- 6 understand them.
- 7 Is that fair?
- 8 A. That is fair.
- 9 Q. And if anything is unclear, you will need to ask
- 10 me to clarify.
- 11 A. Excellent.
- 12 Q. Is there anything that would prevent you from
- 13 thinking clearly and testifying truthfully today?
- 14 A. No.
- 15 Q. If at any point you need to take a break during
- 16 your deposition, just let me know. I only ask that we
- 17 don't take a break while a question is pending.
- 18 A. Okay. Thank you.
- 19 Q. And we'll try to take a break every hour or so,
- 20 but if you ever need one, just let me know.
- 21 A. Okay. Thank you.
- 22 Q. So are you aware that you are here to testify
- 23 regarding a claim construction declaration you submitted in
- 24 this case?
- 25 A. Yes.

- 1 Q. Are you aware that you submitted two declarations?
- 2 A. So far, yes.
- 3 Q. Are you planning to submit more?
- 4 A. If there's a need for it, I would be able to.
- 5 Q. And so one declaration was on behalf of T-Mobile
- 6 or the T-Mobile defendants; is that correct?
- 7 A. Yes.
- 8 Q. All right. And another declaration was on behalf
- 9 of Verizon. Does that sound correct?
- 10 A. Yes.
- 11 Q. And the T-Mobile declaration was submitted
- 12 earlier, correct?
- 13 A. That's right. A couple weeks prior to the Verizon
- 14 declaration.
- 15 Q. We will look at it shortly, but I just want to
- 16 establish some background information.
- 17 The T-Mobile declaration is dated August 9th,
- 18 2024. Does that sound right?
- 19 A. That does sound right.
- 20 Q. And the Verizon declaration -- I believe you said
- 21 it was later, and the date I have for that is August 24th,
- 22 2024. Does that --
- 23 A. That does sound right. Yes.
- 24 Q. Okay.
- 25 Are these two declarations the same in substance?

- 1 A. Yes. I think there is very minor differences
- 2 between them.
- 3 Q. Are you aware of any substantive differences
- 4 between them, apart from the case caption and so forth?
- 5 A. I think the Verizon declaration in two paragraphs
- 6 has one sentence omitted, and it's about the file history
- 7 of the patents.
- 8 Q. Okay. Apart from that, are you aware of any other
- 9 differences?
- 10 A. No. Nothing sitting here right now.
- 11 Q. And when I say "differences," I mean substantive
- 12 or in your opinions, you know. I'm not talking about the
- 13 case caption, that sort...
- 14 A. Sure. No. No differences in my opinions.
- 15 Q. So your recollection is that the Verizon
- 16 declaration two paragraphs says one sentence omitted and
- 17 it's about the file history of the patents, correct?
- 18 A. I think both times. Yes.
- 19 Q. And is there any material that was added?
- 20 A. Nothing that comes to mind.
- 21 Q. The sentences that were omitted, why were they
- 22 omitted?
- 23 (Clarification by the certified stenographer.)
- 24 ATTORNEY VINCENT: Object to form. To the extent
- 25 there is -- the discussions you've had were -- would reveal

- 1 any attorney-client communications, I'd instruct you not to
- 2 answer.
- THE WITNESS: They were just omitted in editing.
- 4 BY ATTORNEY WANG:
- 5 Q. By you?
- 6 A. Yes.
- 7 Q. Did you discuss the removal with your counsel?
- 8 ATTORNEY VINCENT: Again, I want to caution the
- 9 witness not to disclose the contents of any discussions
- 10 that he may have had, the substance of any discussions that
- 11 they had with counsel.
- 12 THE WITNESS: Yeah. I'll take counsel's advice
- 13 regarding that question.
- 14 BY ATTORNEY WANG:
- 15 Q. So I think my question was, did you discuss the
- 16 removal with your counsel, calling for a yes or no.
- 17 ATTORNEY VINCENT: Again -- sorry. Go ahead.
- 18 Finish.
- 19 ATTORNEY WANG: And, Counsel, I would encourage
- 20 you to limit speaking objections, and be clear whether
- 21 you're instructing the witness not to answer or not. And,
- 22 you know, if that's what you're doing, please make that
- 23 clear.
- 24 ATTORNEY VINCENT: I am being clear, and I'm not
- 25 making speaking objections. So are you finished with your

- 1 question?
- 2 ATTORNEY WANG: Yes.
- 3 ATTORNEY VINCENT: Okay. I'm going to object and
- 4 instruct the witness not to answer to the extent the
- 5 response would disclose substantive conversations that the
- 6 witness had with counsel.
- 7 BY ATTORNEY WANG:
- 8 Q. Okay. Without asking you to disclose the
- 9 substance of conversations, Dr. Turnbull, are you able to
- 10 answer yes or no to my question, which is, did you discuss
- 11 the removal of the sentences that you referred to with your
- 12 counsel?
- 13 A. I won't answer that at counsel's advice.
- 14 Q. So you're following your counsel's instruction on
- 15 that?
- 16 A. That's right.
- 17 Q. Okay.
- 18 Since the substance of your two declarations are
- 19 substantially the same or the same, do you agree with me on
- 20 that?
- 21 A. Yes.
- 22 Q. So if we talk about one declaration, will you
- 23 understand your testimony to also apply to the other
- 24 declaration?
- 25 A. I'll agree to that. Yes.

- 1 Q. And so I want to first ask you about the first
- 2 declaration that you submitted on behalf of T-Mobile on
- 3 August 8th, 2024. Are you with me?
- 4 A. August 9th?
- 5 Q. Excuse me. August 9th, 2024?
- 6 A. Sure.
- 7 Q. Who wrote that declaration?
- 8 ATTORNEY VINCENT: Object to form.
- 9 THE WITNESS: I collaborated with counsel. I
- 10 certainly didn't type every single character. There were
- 11 some things that got pasted in. A very substantial portion
- 12 of it, I did type. I edited. But regardless of who typed
- 13 every character, it does represent, you know, my thoughts
- 14 and opinions.
- 15 BY ATTORNEY WANG:
- 16 Q. You said that some things got pasted in. What got
- 17 pasted in?
- 18 A. Oh, like quotes from the patent or the figures,
- 19 for example, things like that.
- 20 Q. That would be something that you rely on counsel
- 21 for, to provide?
- 22 A. It could have been that they pasted some in. It
- 23 could have been that I did. I just don't recall the
- 24 editing process at that level.
- 25 Q. Are you aware of anything else that got pasted in,

- 1 or are you referring to anything else?
- 2 A. It's possible some of the legal boilerplate was
- 3 pasted in. But, of course, I reviewed it, and if there
- 4 were any questions about it, I edited it to be either more
- 5 readable or more understandable to at least me since it
- 6 represents my opinions and the basis that my opinions come
- 7 from.
- 8 Q. So the legal standard section of your report is
- 9 the basis where your opinions come from?
- 10 A. It would be one part, but that's why it's in the
- 11 report.
- 12 ATTORNEY VINCENT: Object to form.
- 13 BY ATTORNEY WANG:
- 14 Q. So when you offer claim construction opinions in a
- 15 case and you've -- strike that.
- You've been an expert in dozens of patent cases,
- 17 correct?
- 18 A. Yes.
- 19 Q. And you have some understanding of legal standards
- 20 of patent law or claim construction based on your work from
- 21 those cases, correct?
- 22 A. Yes. I suspect I've added to it over time, and,
- 23 of course, I guess the laws underlying the rules have
- 24 changed over time as well.
- 25 Q. So when you offer opinions like in a declaration,

- 1 do you rely on your understanding of the law formed from
- 2 different cases, or do you just rely on what's in your
- 3 report or stated in your report?
- 4 ATTORNEY VINCENT: Object to form.
- 5 THE WITNESS: That's a good question. It's
- 6 probably my cumulative experience but also acknowledging
- 7 that there may be precedence that change, or based on the
- 8 breadth or the depth of what I'm asked to analyze, I may
- 9 put more thought into some parts than others. But,
- 10 generally, you know, based on my -- my skills and
- 11 experience and, like you suggested, my prior work as well.
- 12 BY ATTORNEY WANG:
- 13 Q. And I'm specifically asking about the legal
- 14 standards that are applicable to your opinions such as
- 15 about claim construction or other aspects of patent law.
- And you would give the same answer?
- 17 ATTORNEY VINCENT: Object to form.
- 18 THE WITNESS: Generally, yes.
- 19 BY ATTORNEY WANG:
- 20 Q. So do you have like the same legal standards that
- 21 you rely on in each case, or do you get them from counsel
- 22 for particular cases?
- 23 ATTORNEY VINCENT: Object to form.
- 24 THE WITNESS: You know, it's hard to say case by
- 25 case. I certainly don't have a perfect memory of it. But,

- 1 nonetheless, I'll certainly review what's relevant and
- 2 include it in the specific report at the time and act from
- 3 those principles. But, again, I also have, you know, my
- 4 own skills and experience. Not only as a computer
- 5 scientist but also just someone that, you know, is well
- 6 read enough to be able to understand language and think
- 7 about what the issues are and how clearly something is
- 8 represented or how well written it is so that it is
- 9 potentially clearly understood.
- 10 BY ATTORNEY WANG:
- 11 Q. So when you're providing technical opinions in a
- 12 case or in a declaration, do you go back and refer to the
- 13 legal standards that are set forth at the beginning of your
- 14 declaration to inform your technical opinions?
- 15 A. Oh, yes. Sometimes I do.
- 16 Q. And do you rely on any legal standards outside of
- 17 what's in your report to inform your technical opinions?
- 18 A. I'm not sure in this report. I don't remember the
- 19 breadth of what standards I had documented. But I would
- 20 say it would be what's documented in the report. But,
- 21 again, also my skills and experience doing that over time.
- 22 Q. For your first declaration on August 9th, how many
- 23 hours did you spend on that report?
- 24 A. Huh. I really don't recall off the top of my
- 25 head. There was a lot to read and review. Maybe 40 hours,

- 1 but I could be off by that much as well. I just don't
- 2 recall.
- 3 Q. Do you recall how many days? Was it 40 hours over
- 4 two grueling days, or was it many days?
- 5 A. It was over many days. Often in the afternoon. I
- 6 think that's my habit for many things.
- 7 Q. Would you say it would be a week or two weeks?
- 8 Can you give me a sense of that?
- 9 A. I would say it would extend over a two-week period
- 10 because I might set it aside and read, think about it, go
- 11 back and edit it. So forth.
- 12 Q. When were you retained to serve as an expert in
- 13 the T-Mobile case?
- 14 A. I should have known you would ask that, but I just
- 15 don't remember.
- 16 Q. Do you remember relative to when you started
- 17 working on the declaration?
- 18 A. Well, certainly it would be before I started
- 19 working on the declaration, of course. But beyond that, I
- 20 don't recall. Certainly in the last several months.
- 21 Q. And you were returned -- retained by or through
- 22 the law firm of Gibson Dunn; is that correct?
- 23 A. That's right.
- 24 Q. And which counsel did you work with on your
- 25 report?

- 1 A. I don't recall the breadth of the people that I
- 2 worked with. I would think primarily it's Mr. Vincent here
- 3 that's with us today.
- 4 Q. And for the second declaration that you submitted
- 5 for the Verizon case, we talked about how your opinions are
- 6 the same in that report, right?
- 7 A. Yes.
- 8 Q. And Verizon is also represented by Gibson Dunn,
- 9 correct?
- 10 A. My understanding, yes.
- 11 Q. And did you work with Mr. Vincent on that second
- 12 report as well?
- 13 A. He was involved. Yes.
- 14 Q. Were different people involved in the Verizon case
- 15 with the Verizon report?
- 16 A. I'm not sure.
- 17 Q. And how many hours did you spend preparing the
- 18 Verizon report?
- 19 A. Fewer hours. It was kind of nice to have the
- 20 pause between the reports to go back and review it and read
- 21 it again. But certainly significantly fewer hours.
- 22 Q. Because your opinions were the same, and you had
- 23 already done the net work on the --
- 24 A. That's right.
- 25 Q. Okay. I'll go back, and I'll be asking you about

- 1 the T-Mobile report, but as we discussed, again, because
- 2 they're the same, you understand, to the extent applicable,
- 3 that they apply to both reports.
- 4 Does your report or declaration contain a complete
- 5 statement of your opinions in these cases?
- 6 A. Yes.
- 7 Q. Sitting here, do you have any corrections to the
- 8 two reports?
- 9 A. There might be one place -- if we stumble cross it
- 10 or it becomes relevant, I'll probably see it -- where I
- 11 wished just to be parallel in the sentence structure. I
- 12 had put a word in quotes. What that word is, I don't
- 13 remember off the top of my head. If we stumble across it,
- 14 I'll note it for you. But I think that's about it.
- Again, having the chance to go back and look at
- 16 the report again before I submitted the report on behalf of
- 17 Verizon, I didn't see any editing errors that I made.
- 18 Again, we may still stumble across some today. And if we
- 19 do, I'll let you know.
- 20 Q. Okay. And what you mentioned was just at one
- 21 point where you had put a word in quotes?
- 22 A. No, I should have -- I should have put a word in
- 23 quotes just to make the sentence structure parallel. It's
- 24 probably a very fine point. If we stumble across it, I'll
- 25 point it out.

- 1 Q. And was that something -- a correction you would
- 2 make to both reports, or it was made in one and not the
- 3 other?
- 4 A. I think it would be something that, if I wanted to
- 5 fix, I would fix it for both.
- 6 Q. Got it.
- 7 And apart from that, you did not see any other
- 8 corrections?
- 9 A. Yeah. Sitting here today, nothing else comes to
- 10 mind.
- 11 Q. Do your reports contain a complete statement of
- 12 your opinions that you intend to offer in this case?
- 13 ATTORNEY VINCENT: Object to form.
- 14 THE WITNESS: I would say they contain my opinions
- 15 so far related to the case.
- 16 BY ATTORNEY WANG:
- 17 Q. Do they contain your opinions that you intend to
- 18 offer for claim construction proceedings in this case?
- 19 A. They do.
- 20 Q. Do they contain a complete statement of your
- 21 opinions that you intend to offer for claim construction
- 22 proceedings in this case?
- 23 A. I would say that they're complete to date. I
- 24 don't know if someone would ask me to do any additional
- 25 work or not.

- 1 Q. Do you currently plan to?
- 2 A. Not unless someone asks me to.
- 3 Q. What did you do to prepare for today's deposition?
- 4 A. Reviewed a lot of the documents, the patents, the
- 5 file histories, my reports, and had review session with
- 6 counsel, including Mr. Vincent, who is with us here today.
- 7 Q. Dr. Turnbull, I believe, in our last deposition,
- 8 we entered into a stipulation, and I want to propose it
- 9 again. I believe we agreed that whenever one of us said
- 10 "report," it would also mean declaration, and if one of us
- 11 said "declaration," it would also mean report.
- 12 Can we agree to that as well?
- 13 A. I will agree to that. I often use them
- 14 interchangeably. It's probably not good to not be
- 15 consistent, but I think it's an error we both seem to be
- 16 making.
- 17 Q. Thank you. I think we've both been toggling back
- and forth, and both of us have been calling it both things.
- 19 Thank you, Dr. Turnbull.
- 20 So you mentioned that you reviewed a lot of
- 21 documents, the patents, the file histories, your reports or
- 22 declarations, and had a review session with counsel.
- 23 Correct?
- 24 A. Yes.
- 25 Q. When you say you reviewed the patents, are you

- 1 referring to the '541 and the '613 patents?
- 2 A. Yes. At least those.
- 3 Q. What other patents?
- 4 A. I think there were some other Headwater patents,
- 5 and I suspect it's possible that I opened them up at some
- 6 point just in reviewing.
- 7 Q. When you say that "there were some other Headwater
- 8 patents," do you mean patents asserted in these cases?
- 9 A. Or at least were asserted in these cases.
- 10 Q. What do you mean, "or at least were asserted in
- 11 these cases"?
- 12 A. I don't remember if -- you know, I don't really
- 13 check the docket to see if all of the patents in the
- 14 original complaint are still at play, but they're just all
- 15 stored in a folder on my -- on my computer together.
- 16 Q. Did you review any Headwater patents that are not
- 17 asserted in these cases?
- 18 A. I don't think so.
- 19 Q. But you have -- you have in the past, correct?
- 20 A. Yes.
- 21 Q. Did you look at the -- the other Headwater patents
- 22 that you may have opined on before in preparing for your
- 23 declaration?
- 24 A. I don't think so.
- 25 Q. And you said the file histories. Do you recall

- 1 which file histories you reviewed?
- 2 A. Oh, probably just for the '541 and the '613
- 3 patents.
- 4 Q. And then, in addition to the patents and file
- 5 histories, you said that you reviewed a lot of documents.
- 6 Can you clarify what you meant by "documents"?
- 7 A. Part of what I meant was what we just discussed,
- 8 the patents and my report and so forth. That might be the
- 9 breadth of it, in fact.
- 10 Q. Can you recall any other documents apart from the
- 11 patents and the file histories and your reports?
- 12 A. Not off the top of my head. No.
- 13 Q. And you said you also met with counsel. Was that
- 14 via Zoom?
- 15 A. Yes.
- 16 Q. And how many meetings did you have with counsel?
- 17 A. Just one.
- 18 Q. And about how long was that meeting?
- 19 A. Not particularly long. Maybe a couple hours.
- 20 Q. And you said that Mr. Vincent was part of the
- 21 meeting?
- 22 A. That's right.
- 23 Q. Do you -- do you recall anyone else?
- 24 A. Not to get their names perfectly correct, I don't.
- 25 ATTORNEY WANG: I would like to go ahead and

- 1 introduce your two reports as exhibits, and what I'll do
- 2 is -- and I think we did this before, Dr. Turnbull. I'll
- 3 send them in the Zoom.
- 4 THE WITNESS: Okay.
- 5 ATTORNEY WANG: And so -- if you -- if you get the
- 6 chance, if you could download them. And when they're
- 7 ready, let me know.
- 8 (Clarification by the certified stenographer.)
- 9 ATTORNEY WANG: Yes. I will be -- Exhibit 1 and
- 10 Exhibit 2.
- 11 (Exhibit 1 was presented and subsequently marked
- 12 for identification.)
- 13 (Exhibit 2 was presented and subsequently marked
- 14 for identification.)
- 15 THE WITNESS: Okay. I downloaded both of them,
- and they both seem to appear and look just fine.
- 17 BY ATTORNEY WANG:
- 18 Q. Could you open the file that begins with
- 19 Exhibit 1.
- 20 A. I've got it open.
- 21 Q. Okay. Thank you.
- So I will introduce as Exhibit 1 a document
- 23 entitled Declaration of Dr. Donald Turnbull, and on the
- 24 first page has the caption for the T-Mobile case with the
- 25 case numbers 223-CV-00379-JRG-RSP.

- 1 Do you -- do you see that, Dr. Turnbull?
- 2 A. I do. I see that on the first page of Exhibit 1.
- 3 Q. And this document is 30 pages, correct?
- 4 A. It looks like it. Yes.
- 5 Q. Does this appear to be a true and correct copy of
- 6 the declaration that you submitted in the case on behalf of
- 7 T-Mobile?
- 8 A. It does. It does. I scrolled down, and I see my
- 9 signature on page 30 and the date, August the 9th, as we
- 10 discussed previously.
- 11 Q. Could you open Exhibit 2, and turn to the first
- 12 page of that.
- 13 A. Okay. I've got it open. I'm with you.
- 14 Q. And so I will introduce as Exhibit 2 a document,
- 15 the first page says declaration of Dr. Donald Turnbull. It
- 16 has the case caption for the Verizon defendants and has the
- 17 case number 223-CV-00352.
- 18 Do you see that?
- 19 A. I do. I'm with you.
- 20 Q. And, Dr. Turnbull, does this appear to be a true
- 21 and correct copy of your second declaration that we talked
- 22 about submitted in the Verizon case?
- 23 A. It looks like it is, and I see that there's
- 24 several pages attached as Exhibit A, which looks like a
- 25 copy of my current CV as well in that PDF file.

- 1 Q. So if you turn to -- so this document, Exhibit 2,
- 2 it's 41 pages, correct?
- 3 A. That's right.
- 4 Q. And if you turn to page 30 of the document, it has
- 5 your signature on that, right?
- 6 A. That's right.
- 7 Q. And it says, this declaration was executed on
- 8 this 24th day of August 2024.
- 9 A. That's right.
- 10 Q. And then this document also has an Exhibit A
- 11 appended to it. Does this Exhibit A at the end of the
- 12 document appear to be a true and correct copy of your CV?
- 13 A. It does.
- 14 Q. Can you please turn to page 9 of your CV, 9 of 10.
- 15 A. Okay. So that'd be page 40 of the PDF?
- 16 Q. Yes.
- 17 A. That's Exhibit 2?
- 18 Q. Yes.
- 19 Do you see on this page it identifies cases
- 20 involving reports, declarations, in-court appearances,
- 21 testimony, or depositions? Do you see that?
- 22 A. I do see that.
- 23 Q. Are these all of the cases that you've done that
- 24 work in or for a certain period of time?
- 25 A. I think they represent all of them unless I've

- 1 just forgotten to include one. That should be a pretty
- 2 complete list.
- 3 Q. Okay. So the first case, you were retained by the
- 4 party Endeca Technologies, Inc.
- 5 Do you see that?
- 6 A. I do.
- 7 Q. Because that party name is bolded, right? That
- 8 means you were retained by them?
- 9 A. That's right. That's what I formatted everything
- 10 in this section to do.
- 11 Q. Do you -- do you recall when that was or when you
- 12 worked on that case?
- 13 A. I would guess 2005 or 2006 or maybe starting in
- 14 2005 going to 2006.
- 15 Q. Okay. Let's go to the bottom of the list.
- 16 Number -- item 36. Do you see that?
- 17 A. Okay. So on the next page, the last page of
- 18 the --
- 19 Q. Yes. On page 10.
- 20 A. -- Exhibit 2. Okay. I'm with you.
- 21 Q. And these cases are in chronological order, right?
- 22 The oldest first and then the most recent last, right?
- 23 A. I would say mostly. There may be some that were
- 24 maybe ongoing at the same time, and I -- they might be one
- 25 ahead of the other based on either when they finished or

- 1 just when I added them. But they're roughly chronological.
- 2 Q. And could you take a look at the last item on the
- 3 list? Do you see that? It says Headwater Research, LLC,
- 4 versus Samsung Electronics --
- 5 A. I do see that.
- 6 Q. -- Company LTD and Samsung Electronics America,
- 7 Inc.?
- 8 Do you see that?
- 9 A. Yes.
- 10 Q. Since it's the most recent case or one of the most
- 11 recent cases, do you have a recollection of that case?
- 12 A. Not really, sitting here today.
- 13 Q. Do you recall being deposed in that case?
- 14 A. That seems familiar. Yes.
- 15 Q. Do you recall being deposed by yours truly in that
- 16 case?
- 17 A. That's what rings a bell. Yes.
- 18 Q. Okay. I'm just trying to reorient you.
- And in that case, you -- do you -- do you remember
- 20 what your opinions were about?
- 21 A. I think that was also claim construction.
- 22 Q. And you submitted a declaration in that case?
- 23 A. That's right.
- 24 Q. And you were -- you were also deposed?
- 25 A. That's right. As you mentioned.

- 1 Q. Did you -- did you review your deposition
- 2 transcript in that case?
- 3 A. I did at the time, but I'm not sure I've looked at
- 4 it since then. I might have, but I don't recall.
- 5 Q. You mean you reviewed it sometime shortly after
- 6 the deposition?
- 7 A. That -- that seems right. Yes.
- 8 Q. Did you make any corrections to your testimony?
- 9 A. I don't recall.
- 10 Q. Do you stand by the testimony you gave in that
- 11 case in that deposition?
- 12 A. Yes. By my recollection, yes.
- 13 Q. Do you recall if you offered in- --
- 14 (Clarification by the certified stenographer.)
- 15 BY ATTORNEY WANG:
- 16 Q. -- indefiniteness opinions in that case?
- 17 A. I think I did.
- 18 Q. Do you know if the court issued a claim
- 19 construction order in that case?
- 20 A. I don't know if that's happened yet.
- 21 Q. And so have you reviewed any claim construction
- 22 order in that case?
- 23 A. I don't recall.
- 24 Q. You don't recall one way or the other, or you
- 25 don't recall reviewing it?

- 1 A. I don't recall one way or the other sitting here
- 2 right now.
- 3 Q. Have you reviewed any claim construction orders in
- 4 other Headwater cases?
- 5 A. I did look at one other one. I just don't
- 6 remember if it's related to what we're just discussing from
- 7 my CV or not.
- 8 Q. The one other one, do you know if it was this
- 9 case?
- 10 (Clarification by the certified stenographer.)
- 11 BY ATTORNEY WANG:
- 12 Q. Let me reask.
- The one other claim construction order that you
- 14 did look at, do you know if it was this case in item 36?
- 15 A. I don't remember the number that was on the first
- 16 page of it.
- 17 Q. Do you remember anything about that order, like
- 18 what it was about?
- 19 A. It was about claim construction and what the judge
- 20 decided on.
- 21 Q. And do you remember what issues the court decided
- 22 or what terms?
- 23 A. Not specifically. I would have to look at it to
- 24 refresh my memory. I think it was by Judge Payne. That
- 25 rings a bell.

- 1 Q. Unfortunately, that does not narrow it down.
- 2 Let me ask you the following: Do you remember
- 3 when you reviewed that order? Was it in preparing for this
- 4 deposition or in preparing your reports?
- 5 A. I would say the former. It's something I looked
- 6 at relatively recently.
- 7 Q. In preparing for this deposition?
- 8 A. Yes.
- 9 Q. And that was the first time that you had seen it?
- 10 A. As far as I can remember, yes.
- 11 Q. Dr. Turnbull, since we have Exhibits 1 and 2 open,
- 12 would you be able to point me to the -- to the sentence
- 13 that was omitted that you testified about this morning?
- 14 A. I can take a look if you'll give me a minute. I
- 15 think I said there were two sentences that were omitted if
- 16 I recall.
- 17 I'm still looking here, if you'll bear with me.
- 18 I don't see it now. I don't remember exactly
- 19 where it was at. Again, if we -- if we talk about
- 20 something and I see it, I'll point it out to you.
- 21 Q. And was your recollection that it would have been
- 22 in the summary of the prosecution history?
- 23 A. That was my recollection, and I don't see it. So
- 24 I don't know if I edited it out in the first place or not.
- 25 I just can't find it here. I know it's not the largest

- 1 declaration in the world, but I just don't see it.
- 2 Q. Okay. Thank you, Dr. Turnbull.
- 3 Let's talk about Exhibit 1, and I think you can
- 4 close Exhibit 2 if it's taking up space since we agree that
- 5 the declarations were substantially the same.
- 6 A. Okay. Thank you.
- 7 Q. Can you turn to paragraph 20 of your report in
- 8 Exhibit 1.
- 9 A. I'm with you. It looks like it's page 7.
- 10 Q. Right.
- And so, paragraph 20, you list that the materials
- 12 that you considered in forming your opinions in the
- 13 declaration, correct?
- 14 A. That's right.
- 15 Q. And this list does not have any claim construction
- 16 orders, correct?
- 17 A. No. That's not listed here.
- 18 Q. And so, if you had reviewed certain claim
- 19 construction orders before submitting the report, you would
- 20 have listed it in this paragraph.
- 21 A. I would hope that I would. Yes.
- 22 Q. And that supports what you said before, if you did
- 23 look at a claim construction order, it would have been
- 24 after --
- 25 A. Exactly right.

- 1 Q. -- this report?
- 2 And was that also after submitting your report in
- 3 the Verizon case?
- 4 A. I think so. Yes.
- 5 Q. Okay. At the time that you submitted this
- 6 T-Mobile report, were there any other documents that you
- 7 relied on that are not on this list?
- 8 A. Nothing comes to mind. You know, of course, in,
- 9 you know, the history of me being a computer scientist, I'm
- 10 sure I review documents all the time, programming
- 11 documents, to just be more educated about my field. But
- 12 nothing that fits into these types of documents.
- 13 Q. Okay. And then, sitting here today, you mentioned
- 14 a claim construction order in a -- in a Headwater case that
- 15 you did look at. Are there any other documents that you
- 16 reviewed or looked at that are not in this list?
- 17 A. Nothing else comes to mind right now.
- 18 Q. Okay. I'm turning back to paragraph 20. Do you
- 19 see how you list the four patents and their file histories?
- 20 A. That's right. I see that.
- 21 Q. Did you review the references cited in the file
- 22 histories?
- 23 A. I might have, now that you say that. Or at least
- 24 I read through the list of the references, I think. Even
- 25 one of the papers that's an academic paper listed is

- 1 something that I read long ago. It rang a bell.
- 2 Q. So how did you read the file history? Did you
- 3 kind of skim through it or, I mean, walk through it? Can
- 4 you kind of describe that?
- 5 A. I think they were pretty big. I probably pulled
- 6 up the first page probably for all of them and just
- 7 reviewed generally what it said there. And then might have
- 8 scrolled through it. There's always, you know, different
- 9 formatting and things like that that may have kept my
- 10 attention probably more than it should sometimes.
- And I suspect, over time, if I went to look at it
- 12 again after getting an overview, I might do some keyword
- 13 searching. But also, scrolling around, I'm never convinced
- 14 that all of the optical character recognition or what's
- 15 inserted are perfectly matching to what we see on the PDF
- 16 itself. So I might do some scrolling around to make sure I
- 17 haven't missed something.
- 18 Or find something that's, you know, kind of
- 19 interesting to me and then read, you know, above and below
- 20 that section as well.
- 21 Q. And you said you reviewed the list of references
- 22 cited for the patents?
- 23 A. I would say I noted them. I, you know, scrolled
- 24 through it to look and see if anything popped up that rang
- 25 a bell or I saw a name that I might know or something like

- 1 that, because often, when you're working in an area you
- 2 know, there might be something that strikes you as familiar
- 3 or it's like, oh, yes.
- 4 Q. And did you do that for each of the asserted
- 5 patents?
- 6 A. That, I'm not sure. Being there was four of them,
- 7 I don't remember if I did that four times or, you know,
- 8 partially on one and then coming back to it later. I just
- 9 don't recall that.
- 10 Q. Do you know if you did that for the '541 and
- 11 the '613 patents?
- 12 A. I'd say the '541 for sure since it's kind of the
- 13 earliest patent. It's probably the one that I looked at
- more just like we're kind of looking at, you know,
- 15 something else here, but beyond that, I don't recall.
- 16 Q. And so for the '541 patent, for example, if you
- 17 look at the list of references cited, it doesn't just have
- 18 like the name of the patent or the number? Or did -- would
- 19 it have the name of the patents?
- 20 A. I think sometimes it would have the number, which
- 21 tells me something about maybe the approximate date of the
- 22 patent, at least when it was filed. But often
- 23 references -- like I said, I think there was an academic
- 24 paper in there as well. I think the file history might
- 25 have mentioned other references as well. And maybe those

- 1 stuck out as something that was interesting, and I looked
- 2 at those or at least looked at what the title was about,
- 3 trying to get an idea if it looked like it was something
- 4 that I should go look at. But, yeah, I certainly didn't
- 5 exhaustively look up the many, many, many references that
- 6 are included.
- 7 Q. You mentioned an academic paper, and you said it
- 8 was something that you read long ago.
- 9 A. That's right. Yeah. I remember it rang a bell.
- 10 Q. What paper was that?
- 11 A. Without looking at the patent, I don't recall
- 12 specifically, but I remember it was one of the references,
- 13 and it was something that I knew. I think it was related
- 14 to location-based services. Maybe it was one of the papers
- 15 that used that term early on.
- 16 Q. Location-based services?
- 17 A. Uh-huh.
- 18 Q. Which is an interest of yours? That topic?
- 19 A. Oh, yeah, certainly. I've been doing work related
- 20 to that for a long, long time. I would say since probably
- 21 the late '90s.
- 22 Q. Do you see, at the bottom of this list, you have
- 23 defendants and plaintiffs exchange of preliminary proposed
- 24 claim constructions and extrinsic evidence?
- 25 Do you see that?

- 1 A. I do.
- 2 Q. And did you just review the documents or the
- 3 documents and whatever was cited therein?
- 4 A. I suspect both the claim construction and at least
- 5 some of the documents that are referenced in it.
- 6 Q. But this list just says the document, it seems.
- 7 ATTORNEY VINCENT: Object to form.
- 8 THE WITNESS: Yeah. I'm not sure what "and
- 9 extrinsic evidence" means in terms -- does that mean other
- 10 documents or not.
- 11 BY ATTORNEY WANG:
- 12 Q. Do you see that you have -- you have four IPR
- 13 petitions on this list?
- 14 A. I do.
- 15 Q. What do you mean by "accompanying papers"?
- 16 A. Probably the references that were used in the
- 17 IPRs.
- 18 Q. Would it include the exhibits to the IPR petition?
- 19 A. I think we're saying the same thing. Yes. Some
- 20 of the documents like prior art references. There could be
- 21 other documents as well. That's probably -- I remember the
- 22 references probably more than some of the legal documents.
- 23 Q. Have you served as an IPR expert before in IPR
- 24 proceedings?
- 25 A. Yes.

- 1 Q. Many times?
- 2 A. Yes.
- 3 Q. For both petitioners and patent owners?
- 4 A. Yes.
- 5 Q. And you know that an IPR petition almost always
- 6 includes an expert declaration?
- 7 A. I guess all the ones I worked on have.
- 8 Q. And so did you review the expert declarations that
- 9 were accompanying these petitions?
- 10 A. If I've got it listed here, that must have been
- 11 something I looked at, but I really don't recall, sitting
- 12 here right now.
- 13 Q. Okay. And would it -- your review of the
- 14 accompanying papers, it would include the prior art
- 15 references of record in those IPRs?
- 16 A. It certainly could. I don't remember how many
- 17 there were or, you know, specifically looking at them, but
- 18 if I was provided them and I've got them listed here, I
- 19 suspect I at least had them to look at.
- 20 Q. Okay. And would it include the prior art
- 21 references that are cited as background references for the
- 22 IPR?
- 23 A. I'm going to say yes, but I'm not sure even what
- 24 you mean by "background." Would there be two kinds of
- 25 references?

- 1 Q. Yeah. Let -- let -- no, let me clarify my
- 2 question.
- 3 So you know in an IPR there will be the prior art
- 4 that's relied upon, right? If there's like three grounds,
- 5 there will be the prior art, either its anticipation ground
- 6 or part of an obviousness combination. The ones that the
- 7 opinion is based on.
- 8 But apart from that, sometimes there can be
- 9 additional references or additional prior art discussed,
- 10 relied on, not as -- not under an IPR ground but as
- 11 background or for other points.
- 12 A. Okay.
- 13 Q. You're nodding your head, so I think you
- 14 understand.
- My question is, then, did you limit your review to
- 16 only, you know, the prior art of record for the grounds
- 17 or -- or it went beyond -- went beyond that?
- 18 A. I don't remember. I suspect, if there was
- 19 something that I was provided or that caught my interest, I
- 20 would have gone to find it if it were another piece of
- 21 background. I just don't recall from the breadth of the
- 22 documents there which were background and which were not.
- 23 Q. Did you rely on the IPR petitions or the
- 24 accompanying papers in the substance of your report?
- 25 A. I don't think I reference them anyplace else in my

- 1 report. No.
- 2 Q. Why not?
- 3 A. Not sure. Just didn't.
- 4 Q. Did you feel like it was not relevant?
- 5 ATTORNEY VINCENT: Object to form.
- 6 THE WITNESS: I didn't really think about it in
- 7 that term. Yeah. I just don't remember.
- 8 ATTORNEY WANG: Let's go off the record.
- 9 (Clarification by the certified stenographer.)
- 10 ATTORNEY VINCENT: Yeah.
- 11 THE VIDEOGRAPHER: Wait.
- The time is now 10:01 a.m. We're going off the
- 13 video record.
- 14 (Recess taken.)
- 15 THE VIDEOGRAPHER: The time is now 10:11 a.m.
- 16 We're back on the video record.
- 17 BY ATTORNEY WANG:
- 18 Q. Welcome back, Dr. Turnbull.
- 19 A. Thank you.
- 20 Q. Did you have any discussions with your counsel
- 21 during the break?
- 22 ATTORNEY VINCENT: You can answer that question
- 23 yes or no.
- 24 THE WITNESS: Yes.
- 25 /////

- 1 BY ATTORNEY WANG:
- 2 Q. Did you discuss the substance of your testimony?
- 3 ATTORNEY VINCENT: I'm going to instruct the
- 4 witness not to answer the question if it involves
- 5 discussions of the substance of what was discussed with
- 6 counsel during the break.
- 7 BY ATTORNEY WANG:
- 8 Q. So my question was a yes or a no, did you discuss
- 9 the substance of your testimony --
- 10 ATTORNEY VINCENT: I'm going to -- sorry.
- 11 BY ATTORNEY WANG:
- 12 Q. Yeah.
- 13 -- without disclosing what the substance was, can
- 14 you answer that yes or no?
- 15 ATTORNEY VINCENT: I'm going to instruct the
- 16 witness not to answer.
- 17 THE WITNESS: Yeah. I'll take counsel's advice
- 18 and not answer that.
- 19 BY ATTORNEY WANG:
- 20 Q. You'll follow counsel's instruction on that?
- 21 A. (Nods head.)
- 22 Q. Dr. Turnbull, can you turn to paragraph 21 of your
- 23 report.
- 24 A. I'm with you on page 8.
- 25 Q. Yes.

- 1 And do you see the heading for that? It says
- 2 legal principles?
- 3 A. I do.
- 4 Q. And those are legal principles concerning claim
- 5 construction, correct?
- 6 A. Yes. Generally. Yes.
- 7 Q. We may have discussed this before, but were these
- 8 legal principles provided from -- by counsel?
- 9 A. I think, for the most part, they were. I
- 10 certainly read through them, analyzed them. I don't recall
- 11 or not whether I edited them.
- 12 Q. And are these the legal principles you relied on
- 13 to form your technical opinions in this case?
- 14 A. I would say, for the most part, yes.
- 15 Q. What do you mean, "for the most part"?
- 16 A. Well, it's discussing the legal principles about
- 17 construing patent claims. So I guess I have some
- 18 understanding, even though I'm not an attorney, about just
- 19 patents in general and the form of them and what they
- 20 should represent. So that certainly comes into play as
- 21 well when I'm trying to build an understanding of the
- 22 patent claims for construction.
- 23 Q. What about the legal standards for claim
- 24 construction? The legal standards I'm speaking of. Did
- 25 you rely on what's stated here or some other understanding?

- 1 ATTORNEY VINCENT: Object to form.
- THE WITNESS: I would say I relied on what's
- 3 stated here in my report.
- 4 BY ATTORNEY WANG:
- 5 Q. So if it's not stated in here, you did not rely on
- 6 that as a legal principle?
- 7 ATTORNEY VINCENT: Object to form.
- 8 THE WITNESS: I guess that's possible. Without
- 9 looking at this and thinking about the complexity these
- 10 represent, I would say that's generally -- generally
- 11 accurate.
- 12 BY ATTORNEY WANG:
- 13 Q. Okay. Can you turn to paragraph 23 of your
- 14 report.
- 15 A. Okay. That's on the next page, page 9.
- 16 Q. Right. So on this page, you discuss an inventor
- 17 acting as his or her own lexicographer. Do you see that?
- 18 A. I do.
- 19 Q. You say (as read):
- 20 I also understand an inventor can use terms in
- a manner other than in their plain and ordinary
- 22 meaning by clearly --
- 23 (Clarification by the certified stenographer.)
- 24 BY ATTORNEY WANG:
- 25 Q. I'm sorry. Let me start over, and I'll read it

1	slower.	
2		In paragraph 23 you say (read):
3		I also understand that an inventor can use
4	1	terms in a manner other than in their plain and
5	(ordinary meaning by clearly, deliberately, and
6		precisely defining those terms in the patent
7	;	specification or in the file history.
8	Do you see that?	
9	A.	Yes.
10	Q.	And then you say (as read):
11		This is referred to as acting as a lexicographer.
12	Do you see that?	
13	A.	Yes.
14	Q.	Are you familiar with the term "disclaimer"?
15	A.	I certainly have heard it before.
16	Q.	What's your understanding of what "disclaimer" is?
17	A.	I don't recall the breadth of what it would mean
18	certainly applied to this.	
19	Q.	Is the concept of disclaimer discussed in your
20	report?	
21	A.	I don't recall that that's in there.
22	Q.	And you don't offer any opinions regarding
23	disclaimer?	
24	A.	Off the top of my head, no. I don't recall doing
25	that.	

- 1 Q. In paragraph 23, you do discuss the concept of
- 2 lexicography, correct?
- 3 A. That's right.
- 4 Q. Do you understand disclaimer and lexicography to
- 5 be related or the same thing or similar?
- 6 ATTORNEY VINCENT: Object to form.
- 7 THE WITNESS: I think my memory is that there is a
- 8 similarity, yes.
- 9 BY ATTORNEY WANG:
- 10 Q. All right. Do you offer any opinions regarding
- 11 lexicography in your report?
- 12 A. No.
- 13 Q. Let's look at the terms. If I can turn your
- 14 attention to paragraph 50 of your report.
- 15 A. Five-zero?
- 16 Q. Yeah. 50.
- 17 A. Okay. On page 18?
- 18 Q. On page 18. Yeah.
- And I want you to look at the first heading. It
- 20 says (as read):
- 21 A, one or more perspective -- dot, dot, dot --
- communications over wireless network ('541 patent,
- 23 claim 1).
- 24 Do you see that?
- 25 A. I do.

- 1 Q. Do you offer any opinions about lexicography or
- 2 disclaimer for this term?
- 3 A. Nothing that I see here. No.
- 4 Q. Can you please turn to paragraph 64 of your
- 5 report.
- 6 A. On page 22. I'm with you.
- 7 Q. Yes. Yes.
- 8 And here, do you see the heading B?
- 9 A. I do.
- 10 Q. And do you see that there is three claim terms in
- 11 that heading?
- 12 A. Yes.
- 13 Q. The first claim term is "backward activity" for
- 14 the '541 patent, claim 1, correct?
- 15 A. Background activity, yes.
- 16 Q. Background activity. Okay.
- 17 For each of these three terms, or any of these
- 18 three terms, do you offer any opinions regarding
- 19 lexicography or disclaimer?
- 20 A. Nothing that I see here. No.
- 21 Q. Okay. Can we turn back to paragraph 23 of your
- 22 report in the legal standards section.
- 23 A. Okay. I'm with you. We're back on page 9.
- 24 Q. Okay. In paragraph 25, you state here --
- 25 (Clarification by the certified stenographer.)

- 1 BY ATTORNEY WANG:
- 2 Q. In paragraph 25, you state your legal
- 3 understanding of "indefiniteness," correct?
- 4 A. Yes.
- 5 Q. And is that the definition that you applied in
- 6 offering your technical opinions in this declaration?
- 7 A. Yes.
- 8 Q. And did you obtain this understanding from
- 9 counsel?
- 10 A. I suspect I had this understanding prior to this
- 11 project because I've done this work before. I think
- 12 paragraph 25 is a good succinct reminder of what I would
- 13 base my technical opinions on.
- 14 Q. Okay. And so can you answer my question, which
- 15 was: Did you obtain this understanding from counsel?
- 16 A. I guess I'm not sure what you mean by the
- 17 question.
- 18 Q. Did you get this language from counsel to put in
- 19 the report?
- 20 A. I think this was part of the boilerplate, but,
- 21 again, I certainly read through it. I've done work like
- 22 this before. And, again, I don't recall if I edited this.
- 23 It certainly seems much more readable than a lot of legal
- 24 standards that might imply that it was edited by -- in some
- 25 way to be more readable, but I don't recall specifically.

- 1 Q. And if an aspect of the legal standard of
- 2 indefiniteness is not in this paragraph, is it fair to say
- 3 that you would not have applied it?
- 4 ATTORNEY VINCENT: Object to form.
- 5 THE WITNESS: I don't know if that's a matter of
- 6 degree of what is missing from this paragraph that you may
- 7 be suggesting or otherwise. I feel like this represents
- 8 the general concept and my understanding of it and what I
- 9 analyzed or thought about to do that. So I'm not sure what
- 10 else it might include. I guess you would have to suggest
- 11 that to let me know if it doesn't fall within the scope of
- 12 what's discussed in this paragraph.
- 13 BY ATTORNEY WANG:
- 14 Q. Do you understand that "breadth" is not
- 15 "indefiniteness"?
- 16 ATTORNEY VINCENT: Object to form.
- 17 THE WITNESS: Breadth?
- 18 BY ATTORNEY WANG:
- 19 Q. Yes. The claim term being broad, that that does
- 20 not make it indefinite.
- 21 A. I think it would depend on the claim term, but
- 22 also breadth probably is relative depending on what that
- 23 term is. Certainly from a technical standpoint.
- 24 Q. What do you mean, "certainly from a technical
- 25 standpoint"?

- 1 A. Well, the language of the claim term, depending on
- 2 what that language is -- some terms might be much broader
- 3 than others, especially since we're talking about software
- 4 where you really should be specific or precise, as I
- 5 believe I discuss in this paragraph, sufficiently precise.
- 6 So it might depend on the term.
- 7 Q. Do you agree that breadth alone does not render a
- 8 term indefinite?
- 9 ATTORNEY VINCENT: Object to form.
- 10 THE WITNESS: I'm not sure. I think it would
- 11 depend on the context if there was an example or if there
- 12 was something I could examine to think about that.
- 13 BY ATTORNEY WANG:
- 14 Q. Do you agree that the indefiniteness requirement
- 15 must take into account the inherent limitations of
- 16 language, reasonable certainty in light of the subject
- 17 matter, and not absolute precision as required?
- 18 ATTORNEY VINCENT: Object to form.
- 19 THE WITNESS: We're back to that word "precision."
- 20 I think, as I have here, it needs to be sufficiently
- 21 precise. So, again, maybe there's the context of what the
- 22 claim language is trying to describe. Certainly in the
- 23 eyes of myself or a person of skill.
- 24 BY ATTORNEY WANG:
- 25 Q. But would you agree with what I said?

- 1 ATTORNEY VINCENT: Object to form.
- THE WITNESS: I think you'd have to read that back
- 3 to me now that I've already spoken.
- 4 BY ATTORNEY WANG:
- 5 Q. Sure.
- 6 The definiteness requirement must take into
- 7 account the inherent limitations of language.
- 8 ATTORNEY VINCENT: Object to form.
- 9 BY ATTORNEY WANG:
- 10 Q. Do you agree with that?
- 11 A. I -- I'm not really sure what that means.
- 12 Q. Do you understand that definiteness can be met by
- 13 reasonable certainty in light of the subject matter and not
- 14 absolute precision as required?
- 15 A. I think, just like I say here, it needs to be
- 16 sufficiently precise. I'm not sure what absolute precision
- 17 really means. That modifier doesn't really help me. It
- 18 just should be precise or, again, like I say here,
- 19 sufficiently precise. Absolute, again, might be a little
- 20 relative depending on the term itself.
- 21 Q. All right. Do you agree that absolute precision
- 22 is not required?
- 23 ATTORNEY VINCENT: Object to form.
- 24 THE WITNESS: I think it might depend. You know,
- 25 if we're talking about software, precision matters. So it

- 1 would just depend on what we'd be looking at.
- 2 BY ATTORNEY WANG:
- 3 Q. Do you understand that indefiniteness must be
- 4 proven by clear and convincing evidence?
- 5 A. Yes. And I think that's probably where maybe
- 6 we're getting tied up a little bit. Absolute precision
- 7 seems to be something that would lead into clarity, and you
- 8 just mentioned "clear." And so, again, I think it depends
- 9 on what that is, whether it's sufficiently precise or, I
- 10 think you said, absolutely precise or absolute precision.
- 11 Q. So in paragraph 26 you just say that, if a claim
- 12 contains an element that is indefinite, then the claim is
- 13 invalid.
- 14 Do you see that?
- 15 A. Yes.
- 16 Q. You don't say anything about indefiniteness
- 17 required to be proven by clear and convincing evidence in
- 18 your legal standards.
- 19 ATTORNEY VINCENT: Object to form.
- 20 THE WITNESS: That's just what I have in that
- 21 paragraph 26. Yes.
- 22 BY ATTORNEY WANG:
- 23 Q. Do you have anything about clear and convincing
- 24 evidence in your report?
- 25 ATTORNEY VINCENT: Object to form.

- 1 THE WITNESS: Nothing that comes to mind. No.
- 2 BY ATTORNEY WANG:
- 3 Q. Can we turn to paragraph 43 of your report.
- 4 A. Sure.
- 5 I'm with you. It's at the bottom of page 15.
- 6 Q. In paragraph 43, you provide a summary of the
- 7 prosecution history of the '541 patent, correct?
- 8 A. In which paragraph?
- 9 Q. Starting on paragraph 43, which is under the
- 10 heading of prosecution history of the '541 patent.
- 11 Do you see that?
- 12 A. Yeah. I see paragraph 43 there at the bottom of
- 13 page 15.
- 14 Q. And so, in this subsection B, you're providing an
- 15 overview or summary of the prosecution history of the '541
- 16 patent?
- 17 A. Yes.
- 18 Q. Do you rely on the prosecution history of the '541
- 19 patent in your claim construction opinions?
- 20 A. I certainly reviewed it and tried to learn as much
- 21 as I could in addition to the patent to help me with my
- 22 understanding of the claim terms.
- 23 Q. Does the prosecution history affect your opinions
- 24 on the '541 patent?
- 25 A. Probably nothing beyond what I have in the

- 1 paragraphs where I discuss the file histories for both of
- 2 these patents in my report.
- 3 Q. So we are looking at that right now for the '541
- 4 patent, correct?
- 5 A. Yes. Starting on, I guess, paragraph 43 but more
- 6 substantively paragraph 44 on page 16.
- 7 Q. So does what -- what you say here, does this
- 8 affect your claim construction opinions for the terms of
- 9 the '541 patent?
- 10 A. I don't know if "affect" is the right word.
- 11 Certainly, reviewing the amendments, you know -- trying to
- 12 do that and make a good faith effort to look at the whole
- 13 file history and, of course, the patent itself to try to
- 14 understand what the claim terms mean was just part of the
- 15 work that I did.
- 16 I list here, you know, one example of how the
- 17 claim terms were amended. And I guess there is some
- 18 context you could learn by -- or try to learn by seeing
- 19 what was changed, because maybe there is some key words
- 20 that help explain, because they tried to improve it, or you
- 21 would hope that's the goal.
- 22 Q. And so you do have here, you know, the -- how the
- 23 claim language was amended. But what is that telling
- 24 you -- what information is that giving you that would be
- 25 relevant?

- 1 A. I guess the possibility of a little extra context
- 2 to try to get more understanding of what they might mean,
- 3 because this is just changes to the claim terms that may be
- 4 reflected in the written description of the patent that may
- 5 give a little more context.
- 6 Q. Sure. And I'm not asking generally, Dr. Turnbull.
- 7 I'm asking, looking at this specific amendment, can you
- 8 describe for me what -- I mean, what specific thing is
- 9 relevant or what you're taking from this that might be
- 10 relevant to your opinions?
- 11 A. I don't know if this shows anything specifically
- 12 that I built upon to form my opinions.
- 13 Q. And you don't discuss that, do you, in your
- 14 report?
- 15 A. No. Other than here. No.
- 16 Q. You show the amendments, but you're not explaining
- 17 A, B, C, what we are learning from these specific
- 18 amendments.
- 19 A. That's right.
- 20 Q. Can we look at the next subsection, overview of
- 21 the -- I'm sorry.
- 22 Subsection D, prosecution history of the '613
- 23 patent above paragraph 48.
- 24 A. Okay. On page 17. I'm with you.
- 25 Q. And here it's short, but in para 49, you provide

- 1 an overview or summary of the '613 patent prosecution
- 2 history. Do you see that?
- 3 A. That's right. Yes.
- 4 Q. Do you rely on the prosecution history of the '613
- 5 patent for your claim construction opinions?
- 6 A. It was part of the documentation that I reviewed.
- 7 I don't recall if it gave me any additional insights, but I
- 8 definitely reviewed it.
- 9 Q. Can you identify any insights that would be
- 10 relevant to your opinions either from the prosecution
- 11 history or stated here about this '613 patent?
- 12 A. Sitting here right now, nothing comes to mind.
- 13 Q. You say that the applicant filed a preliminary
- 14 amendment and additional -- and an additional
- 15 nonsubstantive amendment following an Ex parte Quayle
- 16 action.
- 17 Do you see that?
- 18 A. I do.
- 19 Q. What is an Ex parte Quayle action?
- 20 A. I remember looking it up, but I've forgotten what
- 21 it means by now.
- 22 Q. Okay. Let's talk about the first term. Can you
- 23 go to paragraph 50 of your report.
- 24 A. I'm with you. Page 18, paragraph 50.
- 25 Q. Excuse me. My light turned off, so I had to turn

- 1 it on.
- 2 So your opinion is about the term "one or more
- 3 prospective -- dot, dot, dot -- communications [over
- 4 wireless network]." Correct?
- 5 A. That's right. That's what we're talking about
- 6 here.
- 7 Q. And you're not offering any claim construction
- 8 opinions about any other terms?
- 9 (Clarification by the certified stenographer.)
- 10 ATTORNEY VINCENT: Object to form.
- 11 THE WITNESS: Well, we have more in my report
- 12 discussing some other claim terms, but here, this is what
- 13 we're discussing, if that's what you're asking.
- 14 BY ATTORNEY WANG:
- 15 Q. Do you have the claim language of claim 1 in your
- 16 report?
- 17 A. I think I have this selected part of it, and it's
- 18 possible it's up above, but maybe not.
- 19 Q. Do you have the claim language of the claims that
- 20 you offer opinions on reproduced in your report?
- 21 A. I think that's what we see in -- I guess it's
- 22 section A or header A we see a quote from the claim
- 23 language itself. So it's produced there.
- 24 Q. In what paragraph are you referring to?
- 25 A. I guess it's -- I know it's -- on page 18 it says

- 1 A, section A. So I don't know if that's called paragraph A
- 2 or not. It's just a heading. And you can see the claim
- 3 language is there in quotations.
- 4 Q. Right. And so this is the claim term, right?
- 5 A. Yes.
- 6 Q. But the full claim language of claim 1, do you
- 7 have it?
- 8 A. Oh, I don't think I inserted the whole -- the
- 9 whole claim here. I was just inserting the relevant terms
- 10 that I was discussing in this report.
- 11 Q. While we're on this, looking at the heading, do
- 12 you see how you have brackets around over wireless network?
- 13 A. I do.
- 14 Q. How should we understand that? What do you mean
- 15 by the brackets?
- 16 A. We could look at the claim itself if you want to
- 17 introduce the '541 as an exhibit. I think it's
- 18 representing the fact that that is in the claim language,
- 19 and we may have the beginning part of the quote in there
- 20 more than once. So I think it's kind of a shorthand for
- 21 referring to the claim term generally.
- 22 Q. Okay. Do you mean that it may appear twice, like
- 23 one that has the full phrase -- dot, dot, dot --
- 24 communications over wireless network, and then again -- and
- 25 it just says communications?

- 1 A. Maybe something like that. I just don't recall.
- 2 If we pull it up, we can probably verify that if you're
- 3 curious.
- 4 Q. If -- if the phrase is always -- and we'll confirm
- 5 that in the claim, but if it's always communications over a
- 6 wireless network, would it be appropriate to look at that
- 7 term?
- 8 ATTORNEY VINCENT: Object to form.
- 9 THE WITNESS: If the word "always" is in there?
- 10 BY ATTORNEY WANG:
- 11 Q. No, no, no. If it -- if it always says
- 12 communications over wireless network. Are you proposing to
- 13 construe it with or without the last part?
- 14 ATTORNEY VINCENT: Object to form.
- 15 THE WITNESS: I guess just what I have here. I've
- 16 included it, so that's what I'm discussing here.
- 17 BY ATTORNEY WANG:
- 18 Q. So what do you mean by the brackets?
- 19 A. I thought I answered that already. I'm not sure
- 20 what else you're asking.
- 21 Q. Does the brackets mean that it can be omitted?
- 22 ATTORNEY VINCENT: Object to form.
- 23 THE WITNESS: I think it's there to -- because
- 24 it's in the claim terms and it's modifying the
- 25 communications, it gives an understanding of

- 1 communications. So that's why it's there.
- 2 ATTORNEY WANG: Let's -- let's -- I'm going to
- 3 introduce two exhibits, Exhibits 3 and 4, and they will be
- 4 the '541 and the '613 patents. So I'll go ahead and send
- 5 them via the Zoom.
- 6 THE WITNESS: Okay.
- 7 (Exhibit 3 was presented and subsequently marked
- 8 for identification.)
- 9 (Exhibit 4 was presented and subsequently marked
- 10 for identification.)
- 11 THE WITNESS: Okay. I've got Exhibit 3 and 4. 3
- 12 is, I guess, what we'll call '541 patent. And looks like
- 13 it's the full PDF of that. 100 pages.
- 14 And then I also downloaded Exhibit 4, which I
- 15 guess we'll call the '613 patent. And it looks like that's
- 16 the entire PDF that is 94 pages by my count.
- 17 BY ATTORNEY WANG:
- 18 Q. Thank you, Dr. Turnbull. So I will just repeat
- 19 what you said, which is I'm introducing as Exhibit 3 to
- 20 Dr. Turnbull's deposition a PDF that's entitled U.S. Patent
- 21 Number 8,589,541, and the document is 100 pages. And, in
- 22 short, we'll refer to this as the '541 patent.
- 23 Dr. Turnbull, does this document, Exhibit 3,
- 24 appear to be a true and correct copy of the '541 patent
- 25 that you discuss in your report?

- 1 A. It does.
- 2 Q. And then, if you could open Exhibit 4, I will
- 3 introduce as Exhibit 4 a patent, U.S. Patent
- 4 Number 9,215,613. It is a PDF document of 94 pages. We
- 5 will refer to it, in short, as the '613 patent.
- 6 Dr. Turnbull, does this Exhibit 4 appear to be a
- 7 true and correct copy of the '613 patent that you discuss
- 8 in your report?
- 9 A. It does.
- 10 Q. So let's open Exhibit 3. And if you could turn to
- 11 claim 1 of Exhibit 3 of the '541 patent.
- 12 A. Okay. I'm there. Looks like it's column 110.
- 13 Q. Okay. I want to turn your attention to the middle
- 14 of the claim, around -- starting on line 21. It says
- 15 (as read):
- The service usage activity comprising one or
- 17 more prospective or successful communications over
- 18 a wireless network.
- 19 Right?
- 20 A. Yes.
- 21 Q. And the term that you've identified for
- 22 construction in your report is -- is part of that phrase I
- 23 just read, right?
- 24 A. That's right.
- 25 Q. So first let me ask you. The term that you are

- 1 proposing for construction is one or more prospective --
- 2 dot, dot, dot -- communications over a wireless network.
- 3 Right?
- 4 A. Yes.
- 5 Q. And so the other words of the claim -- do you see
- 6 it begins with, the service usage activity? Or, the
- 7 service usage activity comprising?
- 8 Do you see that?
- 9 A. I do.
- 10 Q. That's not part of your term for construction,
- 11 right?
- 12 A. No.
- 13 Q. And so you don't opine that -- you aren't offering
- 14 any opinions about the meaning of that term?
- 15 A. No.
- 16 Q. You don't offer any opinions that that term is
- 17 indefinite?
- 18 A. No opinion either way.
- 19 Q. And then do you see part of the claim language
- 20 that says, successful communications over a wireless
- 21 network?
- 22 A. Yes.
- 23 Q. I guess it can be plural or not. Successful
- 24 communication or communications over a wireless network.
- 25 Do you -- do you see that?

- 1 A. Yeah. It looks like it's plural.
- Q. And that part, successful communications over a
- 3 wireless network, you don't have an opinion that that's
- 4 indefinite, right?
- 5 A. Could you ask the question again, please?
- 6 Q. Sure.
- 7 Let me try it again.
- 8 So the part of this claim phrase that says, one or
- 9 more successful communications over a wireless network or
- 10 just successful communications over a wireless network --
- 11 are you with me?
- 12 A. Yes.
- 13 Q. That's not the term that you're proposing for
- 14 construction.
- 15 A. That's right.
- 16 Q. And you don't offer any opinion that that phrase
- 17 is indefinite?
- 18 A. No.
- 19 Q. That phrase being successful communications over a
- 20 wireless network.
- 21 A. That's right.
- 22 Q. In fact, returning to your declaration, your
- 23 opinion is that the scope of a, quote, successful
- 24 communication is sufficiently clear, correct?
- 25 A. Yes.

- 1 Q. And let's go back to your declaration and look at
- 2 paragraph 53.
- 3 A. Okay. I think that's where we were anyway.
- 4 Q. Yes.
- 5 And you say that the scope of a successful
- 6 communication over wireless network is sufficiently clear
- 7 to you.
- 8 A. Yes. That's what I've got there in paragraph 53.
- 9 Q. And you're making this statement like in the
- 10 context of the claims and specification of the '541 patent,
- 11 right?
- 12 A. Yes.
- 13 Q. And you say that it means a communication that
- 14 successfully travels over a wireless network to its
- 15 intended destination?
- 16 A. That's right.
- 17 Q. And then you say, i.e., a successful communication
- 18 over a wireless network.
- 19 Do you see that?
- 20 A. That's right.
- 21 Q. And so what does "i.e." mean?
- 22 A. "In other words."
- 23 Q. Or it means "that is," right?
- 24 A. Yeah.
- 25 Q. So here, you're pretty much saying that, you

- 1 know -- the longer phrased -- that is what a successful
- 2 communication over a wireless network is, right?
- 3 A. Yes.
- 4 Q. Have you heard of the word "prospective" before?
- 5 A. Sure.
- 6 Q. What does "prospective" mean?
- 7 ATTORNEY VINCENT: Object to form.
- 8 THE WITNESS: I guess it refers to something that
- 9 is eligible. "Potential" maybe is more accurate. Just
- 10 generally ideas like that.
- 11 BY ATTORNEY WANG:
- 12 Q. And that's the meaning in English usage?
- 13 A. I don't know if that's the dictionary definition,
- 14 but you just asking me, that comes to mind.
- 15 Q. And the words that you gave were "eligible" or
- 16 "potential," right?
- 17 A. Yes.
- 18 Q. And you said that maybe "potential" is more
- 19 accurate?
- 20 A. Yes.
- 21 Q. Are you married, Dr. Turnbull?
- 22 A. I'm not sure how to answer that question.
- 23 Q. I didn't mean to be appropriate.
- 24 But if -- I mean, would it make sense to think of
- 25 someone as a prospective partner or a prospective spouse?

- 1 ATTORNEY VINCENT: Object to form.
- 2 THE WITNESS: I guess that would be one type of
- 3 prospective something. Yes.
- 4 BY ATTORNEY WANG:
- 5 Q. And that might fit the meaning of "eligible" or
- 6 "potential"?
- 7 A. Oh, I see. "Eligible" maybe cued you in to that
- 8 line of thought.
- 9 Yeah. I think that's true. I think, you know,
- 10 relationships between two people maybe is a little
- 11 different than, you know, for technical things, but I think
- 12 we're in the same ballpark with ideas like that.
- 13 Q. I want to turn your attention to -- okay. In
- 14 the '541 patent -- and we can -- we can look at the claim
- 15 language. It talks about service usage activities, right?
- 16 A. That's right. We discussed that a little bit a
- 17 few minutes ago.
- 18 Q. And it says that the service usage activity can
- 19 comprise one or more communications.
- 20 ATTORNEY VINCENT: Object to form.
- 21 BY ATTORNEY WANG:
- 22 Q. Right?
- 23 A. Yes.
- 24 Q. So I want to ask you about paragraph 58 of your
- 25 report.

- 1 A. Okay.
- 2 Q. In paragraph 58, again, you say, the '541 patent
- 3 includes extensive disclosures regarding how particular
- 4 service usage activities may be initiated.
- 5 Do you see that?
- 6 A. I do. We're following that paragraph onto the
- 7 next page, page 21 of my report.
- 8 Q. Yes.
- 9 And I just want to focus on this first part
- 10 (as read):
- 11 The '51- -- '541 patent includes extensive
- 12 disclosures regarding how particular service usage
- activities may be initiated.
- 14 You see that?
- 15 A. I do.
- 16 Q. And does this also refer to service usage
- 17 activities that comprise one or more communications?
- 18 ATTORNEY VINCENT: Object to form.
- 19 THE WITNESS: It's certainly referring to
- 20 communications, types of communications.
- 21 BY ATTORNEY WANG:
- 22 Q. And so, when you say "may be initiated," you are
- 23 referring to communications or one or more communications.
- 24 That would fit into what you're describing?
- 25 ATTORNEY VINCENT: Object to form.

- 1 THE WITNESS: I guess the communications would be
- 2 part of a service usage activities as we see in some of the
- 3 examples that I cite here in the patent.
- 4 BY ATTORNEY WANG:
- 5 Q. And when you're -- and when you're talking about
- 6 may be initiated, that would apply to communication -- a
- 7 communication may be initiated?
- 8 A. The activities of which a communication may be
- 9 part of the activity, yes.
- 10 Q. Does it make sense to talk about a communication
- 11 being initiated?
- 12 ATTORNEY VINCENT: Object to form.
- 13 THE WITNESS: Generally or related to something
- 14 specifically?
- 15 BY ATTORNEY WANG:
- 16 Q. I mean communication in the context of the patent
- 17 in the context of this sentence.
- 18 A. I guess, to some extent, we have, you know, a
- 19 service usage activity that could have one or more types of
- 20 communications and, again, over a wireless network, as
- 21 we've been discussing.
- 22 Q. Okay. Let's talk about when a communication is
- 23 initiated. At that point, the communication is not a
- 24 successful communication, right?
- 25 A. No.

- 1 Q. And that's because, if you read the rest of your
- 2 sentence, the communication's subsequently blocked,
- 3 throttled, or otherwise not permitted to be -- to occur,
- 4 right?
- 5 A. That's right.
- 6 Q. Okay. So in this sentence beginning with,
- 7 the '541 patent includes extensive disclosures, you're not
- 8 referring to successful communications over a wireless
- 9 network.
- 10 A. Yes. That's right.
- 11 Q. Okay. And so -- then I want to -- returning back
- 12 to this sentence, and then we're talking about
- 13 communications, and then we talk about communications that
- 14 may be initiated.
- 15 Are you with me so far?
- 16 A. I think so. I think that's what we were talking
- 17 about.
- 18 Q. Let's discuss this situation after a communication
- 19 is initiated. Would that be a prospective communication
- 20 over a wireless network?
- 21 A. I don't know. That's not what it says throughout
- 22 the patent. I think, if they wanted to say prospective,
- 23 that's what they would have said. But that's not what they
- 24 say.
- 25 Q. But I'm asking you for your -- for your

- 1 understanding. So we're talking about a communication in
- 2 this sentence. We're talking about right after it's
- 3 initiated. And we're stopping there.
- 4 Would that be a prospective communication over a
- 5 wireless network?
- 6 A. We can't tell, and, again, that's why we have this
- 7 whole discussion. It's just not described precisely
- 8 anywhere in the patent. They just don't give you that
- 9 definition of what "prospective" means, and that's why it's
- 10 indefinite.
- 11 Q. Okay. Well, I'm asking you as a person of
- 12 skill -- skill in the art. Why wouldn't it be considered a
- 13 prospective communication over a wireless network?
- 14 A. Why wouldn't "it"?
- 15 Q. Yes. The communication after it's initiated.
- 16 A. Because there can be more than one type of
- 17 communication or class of communication, and all we see in
- 18 your example or all we hear in your example is this
- 19 communicated that's -- communication that's initiated.
- 20 There's no definition, other than by some examples, what
- 21 that means.
- 22 And my understanding of computer science and how
- 23 communication protocols work -- a prospective communication
- 24 could be something different than an initiated
- 25 communication.

- 1 And that's why, if they had stated that correctly
- 2 or defined that somewhere in all 99 pages of the patent, we
- 3 probably wouldn't be having this discussion. It's just --
- 4 it's not definite what the terms mean. I am not going to
- 5 say that it's interchangeable with "initiated."
- 6 Q. Okay. So we -- we already talked about -- and you
- 7 have no problem understanding that it's not a successful
- 8 communication over a wireless network, right?
- 9 A. At least at that phase as we hope to understand
- 10 it.
- 11 Q. So we agree on that. So why would it not be
- 12 considered by a --
- 13 (Clarification by the certified stenographer.)
- 14 BY ATTORNEY WANG:
- 15 Q. Why would it not be considered by a POSITA to be a
- 16 prospective communication over a wireless network?
- 17 A. Are you asking why an initiated --
- 18 Q. Yes.
- 19 A. -- communication as they define it would not be
- 20 the same thing as a prospective communication?
- 21 Q. No, no. What -- okay.
- 22 Returning to your opinion in paragraph 58.
- 23 A. Uh-huh.
- 24 Q. And we're discussing a communication that is
- 25 initiated. At that point, why would the communication --

- 1 why couldn't the communication be considered a prospective
- 2 communication over a wireless network?
- 3 A. Why couldn't it be considered?
- 4 Q. Yeah, yeah. Why not?
- 5 A. It's possible, but there could be other types of
- 6 prospective communications as well. So it's not a
- 7 one-to-one match. Again, we just don't have enough clarity
- 8 in the patent to define what prospective means because
- 9 it's -- it's not used.
- 10 Q. Okay. So you agree with me that a POSITA could
- 11 consider a communication when it's initiated to be a
- 12 prospective communication over a wireless network?
- 13 A. There could be many, many types of possibilities
- 14 that the communication -- of communication types. Again,
- we don't see in the patent them defining what prospective
- 16 is, so it's indefinite. And I guess it's possible that a
- 17 person of skill might think it could be, but it's not
- 18 taught in the patent. There's no clarity about what that
- 19 means. If someone is struggling and saying this is a
- 20 communication, maybe it's that, but also maybe it's not.
- 21 Maybe sometimes it is; maybe sometimes it's not. There's
- 22 just no clarity in the written description to let us
- 23 understand that.
- 24 Q. Okay. I want you to focus on my question,
- 25 Dr. Turnbull. So I'm focusing on this hypothetical of a

- 1 communication that's initiated.
- 2 And my question to you was that -- could a POSITA
- 3 consider this a prospective communication over a wireless
- 4 network. And I believe your answer was that a POSITA
- 5 could -- could consider it that, right?
- 6 I'm not asking about anything else. I want you to
- 7 stick to my question. My first question is, could a POSITA
- 8 consider that to be a prospective communication over a
- 9 wireless network?
- 10 A. I think we just don't know because it's just not
- 11 defined well enough.
- 12 Q. I mean, earlier I asked you. Your response was:
- 13 I guess it's possible that a person of skill might think it
- 14 could be what I said.
- 15 Do you stand by that?
- 16 A. It's also just as impossible. It's just one of
- 17 the things when you have something that's not defined that
- 18 you're kind of guessing what it might be.
- 19 Q. So I do understand your testimony that maybe it
- 20 could be considered other things, right, but I'm focusing
- 21 on what I'm -- the hypothetical I'm presenting, right,
- 22 which is the communication is initiated. At that point,
- 23 could a POSITA consider that a prospective communication
- 24 over a wireless network?
- 25 A. Yeah. I just don't know if they could or not.

- 1 Even the fact that you mentioned as a hypothetical, it just
- 2 depends on what the technical architecture might or might
- 3 not be, what -- how the system works. There are just too
- 4 many unknowns there. It literally is indefinite.
- 5 Q. Okay. Can you tell me -- can you then -- can you
- 6 explain to me why a person would not consider it a
- 7 prospective communication over a wireless network?
- 8 A. Oh, gosh. I think that's like proving a negative.
- 9 Maybe I can answer it this way. And if it's not right, you
- 10 can ask that again. You know, when you're building
- 11 software, you have to be precise. And when you're
- 12 describing an invention that should be what a patent is
- 13 about, you need to describe that and then, I guess, prove
- 14 it's novel, that it's patentable.
- And in order to do that, you have to be precise in
- 16 describing that, especially with software, where I could
- 17 have 10,000 lines of code. And one thing is wrong; it
- 18 won't work. So precision is required.
- 19 It's required in describing what you're telling
- 20 someone how to build. You're teaching in the patent. And
- 21 in this case, it's not specified. It's not described in
- 22 the written description. The variety of hypothetical or
- 23 technical ways that, you know, have variations as well are
- 24 so wide that you just aren't taught that in this. There
- 25 are just no definition for what that term means in the

- 1 patent. So a person of skill might try to guess, but it
- 2 would be just that, because it's not defined.
- 3 Q. Okay. So that -- that was kind of a general
- 4 answer. But I want to know if you can give me some
- 5 specifics. If we're two persons of ordinary skill, right,
- 6 and one said, yes, after it's initiated, I think it would
- 7 be or could be considered a communication -- a prospective
- 8 communication over a wireless network.
- 9 If the other person of skill disagreed and said,
- 10 no, it could not be, it would not be considered that, what
- 11 would be the technical reasons why it would not be
- 12 considered that? Can you give me specific technical
- 13 reasons?
- 14 A. I guess, before I have a technical reason, I would
- 15 say that your person 1 actually used the term and tried to
- 16 define it. They said this initiated one could be
- 17 prospective. And then you could argue about that and say
- 18 what do you mean and what are the parameters. But that's
- 19 already what person 1 did, more than we have in the patent.
- 20 So if that existed in the patent, we probably
- 21 wouldn't be having this discussion. So the hypothetical of
- 22 a person 1 literally trying to define it, that's great.
- 23 Then that's kind of a different discussion than us trying
- 24 to make sense of what "prospective" means because it's not
- 25 mentioned in the patent. I don't know if you follow me

- 1 there, but that's my thought there.
- 2 Q. Right.
- 3 Dr. Turnbull, I don't know if this is an attempt
- 4 to define it. We're looking at your opinions in your
- 5 report, right? And you're talking about -- you know,
- 6 you're talking about how communication may be initiated,
- 7 right? So we're going along with -- and we're looking at
- 8 it then. And so I'm -- and that was how my question
- 9 started. We're looking at the communication then.
- 10 After it's initiated -- right after it's
- 11 initiated, and that's what our POSITA or two POSITAs are
- 12 looking at. And so what I'm proposing is that a POSITA
- 13 would consider that a prospective communication over a
- 14 wireless network.
- 15 Can you explain to me why -- specific technical
- 16 reasons why that would not be the case to a POSITA.
- 17 A. I really can't because we just don't have enough
- 18 of the technical architecture to discuss. That's just --
- 19 that is like a hypothetical -- of a hypothetical universe
- 20 of technical things. Probably simply -- and maybe I said
- 21 this before, but it's my way of thinking about it. And
- 22 that's what I say in my report. Is that, if something were
- 23 to be described as maybe initiated, that's what it's
- 24 described as. And if it were described as prospective, I
- 25 would understand that that's something different if that

- 1 was explained.
- 2 So I can't map initiated to prospective because
- 3 systems are just more complicated than that. Hypothetical
- 4 and real. You could have things that are prospective but
- 5 not even initiated yet. There's just the -- the breadth of
- 6 that is just simply too -- too broad, and it's just not
- 7 defined in the patent, and that really is a problem in, you
- 8 know, the claim term and the written description.
- 9 Q. Can we look at the rest of your sentence in
- 10 paragraph 58. You say (as read):
- 11 May be initiated but are subsequently blocked,
- throttled, or otherwise not permitted to occur.
- Do you see that?
- 14 A. I do.
- 15 Q. Those things could happen as a result of applying
- 16 a network control policy, correct?
- 17 A. I guess at least that. There may be other things
- 18 the patent describes related to, say, blocking, if I
- 19 remember.
- 20 ATTORNEY VINCENT: Hey, Philip, we've been going
- 21 about an hour, so whenever you get a stopping point would
- 22 be good.
- 23 ATTORNEY WANG: Sure. I'll try to wrap up shortly
- 24 on this line of questioning.
- 25 /////

1	RY	ATT	TORI	VFY	WANG:

- 2 Q. So you agree that blocked, throttled, or otherwise
- 3 not permitted to occur can be the result of applying a
- 4 network control policy?
- 5 ATTORNEY VINCENT: Object to form.
- 6 THE WITNESS: I don't know if that's the exact
- 7 phrase in the patent, but I think generally that would be
- 8 the types of things that we might see that could happen
- 9 over a network when there's some control over it.
- 10 BY ATTORNEY WANG:
- 11 Q. And what about what's described in the claim about
- 12 applying a policy?
- 13 A. Yeah. That's what I thought you were referring
- 14 to.
- 15 Q. Okay. Okay. All right. So we were talking about
- 16 that in the claim of policy.
- 17 Okay. Let's go off the record.
- 18 (Clarification by the certified stenographer.)
- 19 ATTORNEY VINCENT: Yes.
- 20 THE VIDEOGRAPHER: All right. The time is
- 21 now 11:14 a.m. We're going off the video record.
- 22 (Recess taken.)
- 23 THE VIDEOGRAPHER: The time is now 11:25 a.m., and
- 24 we are back on the video record.
- 25 /////

- 1 BY ATTORNEY WANG:
- 2 Q. Welcome back, Dr. Turnbull.
- 3 A. Thank you.
- 4 Q. Did you speak to your counsel during our break?
- 5 ATTORNEY VINCENT: You can answer that question
- 6 yes or no.
- 7 THE WITNESS: Yes.
- 8 BY ATTORNEY WANG:
- 9 Q. Did you discuss the substance of your testimony
- 10 with counsel during our break?
- 11 ATTORNEY VINCENT: I'm instructing the witness not
- 12 to answer.
- 13 BY ATTORNEY WANG:
- 14 Q. Will you follow that instruction?
- 15 A. I will.
- 16 Q. Dr. Turnbull, let's turn to paragraph 61 of your
- 17 report.
- 18 A. Okay. On page 21.
- 19 Q. Yes.
- 20 So at the very, very end of it, you say (as read):
- 21 As I discuss above, this is the fundamental
- 22 purpose of the invention described in the '541
- 23 patent, namely, to --
- 24 (Clarification by the certified stenographer.)
- 25 /////

- 1 BY ATTORNEY WANG:
- 2 Q. Sure. Let me start again.
- In paragraph 61 of your report, Doctor, at the end
- 4 of that paragraph, you say, quote (as read):
- 5 As I discuss above, this is the fundamental
- 6 purpose of the invention described in the '541
- 7 patent, namely, to prevent certain background
- 8 activity from accessing a wireless network in
- 9 certain instances, end quote.
- 10 Do you see that?
- 11 A. I do.
- 12 Q. And do you agree with that?
- 13 A. Yes.
- 14 Q. And the way that certain background activity is
- 15 prevented from accessing a wireless network is by applying
- 16 a network control policy, correct?
- 17 ATTORNEY VINCENT: Object to form.
- 18 THE WITNESS: I guess, generally, yes.
- 19 BY ATTORNEY WANG:
- 20 Q. And that's the -- network control policy is the
- 21 claimed term policy in claim 1 of the '541 patent?
- 22 ATTORNEY VINCENT: Object to form.
- 23 THE WITNESS: Yes.
- 24 BY ATTORNEY WANG:
- 25 Q. So claim 1 of the '541 patent describes

- 1 communications -- sorry. Strike that.
- Claim 1 in the '541 patent describes applying
- 3 policies to communications.
- 4 ATTORNEY VINCENT: Object to form.
- 5 THE WITNESS: Was that a question?
- 6 BY ATTORNEY WANG:
- 7 Q. Yes.
- 8 A. Oh. I'm sorry.
- 9 Q. Yes. Do you agree that claim 1 in the '541 patent
- 10 describes applying policies to communications?
- 11 ATTORNEY VINCENT: Object to form.
- 12 THE WITNESS: To communications over wireless
- 13 network, yes, because that's what it says there.
- 14 BY ATTORNEY WANG:
- 15 Q. Okay. Let me just rephrase again to get your --
- 16 to get your answer correct.
- 17 A. Okay.
- 18 Q. Do you agree that claim 1 of the '541 patent
- 19 describes applying policies to communications over a
- 20 wireless network?
- 21 ATTORNEY VINCENT: Object to form.
- 22 THE WITNESS: Mostly, yes.
- 23 BY ATTORNEY WANG:
- 24 Q. And then, at the top of paragraph 61, do you see
- 25 in the first sentence you have three terms that are in

- 1 quotes: communication, prospective communication, and a
- 2 successful communication?
- 3 Do you see that?
- 4 A. I do.
- 5 Q. And as we discussed before, your indefiniteness
- 6 opinion is about the middle term, right, prospective
- 7 communication?
- 8 A. That's right.
- 9 Q. You don't have an opinion that the term
- 10 "communication" by itself is indefinite, the first term?
- 11 A. No.
- 12 Q. And you don't have the opinion that the third
- 13 quoted term, "successful communication," is indefinite?
- 14 A. No.
- 15 Q. Can you turn to paragraph 62 of your report.
- 16 A. Okay. I'm with you. We're on page 22 now.
- 17 Q. Yes.
- Okay. So in the middle of this paragraph you talk
- 19 about like the illogical result of the, quote (as read):
- 20 Successful communication over a wireless
- 21 network from being blocked from leaving the device
- at all.
- 23 Do you see that?
- 24 A. Yes.
- 25 Q. Okay. Does the --

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1 (Clarification by the certified stenographer.) BY ATTORNEY WANG: 2 3 Q. Does claim 1 of the '541 patent require this? 4 ATTORNEY VINCENT: Object to form. 5 THE WITNESS: I think, like I say here, the claim 6 describes a situation where you have the successful 7 communication over a wireless network, and the problem 8 therein with that, as I described in all with paragraph 62 9 here, it's counterintuitive or just incorrect or vague. 10 (Disruption in the Zoom connection.) 11 (Clarification by the certified stenographer.) ATTORNEY WANG: Yes. Let's go off the record. 12 13 ATTORNEY VINCENT: Sure. 14 THE VIDEOGRAPHER: The time is now 11:32 a.m., and we're going off the video record. 15 16 (Discussion held off the record.) 17 THE VIDEOGRAPHER: All right. ATTORNEY WANG: Welcome back, Dr. Turnbull. 18 19 THE VIDEOGRAPHER: The time is now 11:35 a.m. 20 We're back on the video record. 21 Sorry. 22 BY ATTORNEY WANG: 23 Q. Welcome back, Dr. Turnbull. 24 Α. Thank you.

We had some technical difficulties, and so at the

25

Q.

- 1 risk of being redundant, I may replow some of the ground we
- 2 just covered.
- 3 So we were talking about your opinion in
- 4 paragraph 62 where you discuss the illogical result of the
- 5 successful communication over a wireless network from being
- 6 blocked from leaving the device at all.
- 7 Do you recall that?
- 8 A. Yes.
- 9 Q. And then my question was, does claim 1 of the '541
- 10 patent require this. And so I'll ask that question again
- 11 and allow you to respond.
- 12 ATTORNEY VINCENT: Object to form.
- 13 THE WITNESS: Does claim 1 require that it be
- 14 blocked? I'm not sure of the question now.
- 15 BY ATTORNEY WANG:
- 16 Q. Yes. Does claim 1 require the situation where a
- 17 successful communication over a wireless network is blocked
- 18 from leaving the device at all?
- 19 A. It has the policy that it mentions, and in the
- 20 embodiments, there are examples where the policy could be
- 21 blocking the communication from leaving the device. And I
- 22 think that's kind of what I have here. Still not sure if
- 23 that's the question you asked.
- 24 Q. Does applying a policy to communication require
- 25 the communication to be blocked from leaving the device at

- 1 all?
- 2 A. It can be one aspect, or, again, from the patent,
- 3 one of the embodiments could include blocking the network
- 4 communication.
- 5 Q. But does it require it?
- 6 ATTORNEY VINCENT: Object to form.
- THE WITNESS: Just in the sense that it's one of
- 8 the potential things that the policy that is described in
- 9 claim 1 could be applied to a communication.
- 10 BY ATTORNEY WANG:
- 11 Q. Right.
- 12 But -- and when we're talking about the word
- 13 "policy," it's just a policy, right? The policy could lead
- 14 to different results -- I mean, that's part of the
- 15 definition of policy, right?
- 16 A. I would think the policy would -- I don't know. I
- 17 feel like "lead to" is not the right phrase. That's why
- 18 I'm trying to improve upon that for us.
- 19 The policy, I guess, could enforce or -- no.
- 20 That's not right either.
- 21 I'm not -- I'm not sure of the right word.
- 22 Q. Sure. But there is a distinction. You could
- 23 apply a policy to a communication, for example, but
- 24 depending on what the policy is or the circumstances of the
- 25 device, it could result in a communication being blocked or

- 1 not.
- 2 Do you agree with that as a general matter?
- 3 A. It could result in -- from the examples we have in
- 4 the Petnik [phonetic] result in the policy being blocked or
- 5 something else about the communication.
- 6 Q. And could it result in the communication being
- 7 allowed?
- 8 A. Huh. I guess that's what we're discussing here,
- 9 is that, if it's allowed, it's already happened. So the
- 10 policy isn't relevant. So that's maybe not a good word
- 11 either, or that's just not how the policy step is.
- 12 Q. You could still think about the policy as being
- 13 applied. It's just that the -- under the policy, the
- 14 communication was allowed?
- 15 A. Maybe this will help. You can tell me. If the
- 16 policy doesn't block it, the communication might be
- 17 allowed. I think we might be saying the same thing. I'm
- 18 just trying to be more specific.
- 19 Q. And that would be a successful communication over
- 20 a wireless network?
- 21 A. It could be. We just don't know.
- 22 Q. Can we turn to section B of your report. It's on
- 23 page 22.
- 24 A. Yeah. I'm with you. It's the same page.
- 25 Q. So we talked about this before. But in this

- 1 heading, you have kind of three terms that are all put
- 2 together in the heading.
- 3 A. Uh-huh.
- 4 Q. Right?
- 5 A. Yes.
- 6 Q. Okay. So the first term is from claim 1 in the
- 7 '541 patent, the second term is from claim 1 of the '613
- 8 patent, and the third term is from claim 6 of the '613
- 9 patent.
- 10 Do you see that?
- 11 A. That's right.
- 12 Q. Why are you grouping these three terms together
- 13 into one heading?
- 14 ATTORNEY VINCENT: Object to form.
- 15 THE WITNESS: Because they're related to
- 16 background activity.
- 17 BY ATTORNEY WANG:
- 18 Q. So you're putting them together because you
- 19 believe that they're all related to the term background
- 20 activity?
- 21 A. That's right.
- 22 Q. I understand your opinion that each of these three
- 23 terms is indefinite, correct?
- 24 A. That's right.
- 25 Q. Do your opinions for these terms depend on one

- 1 another?
- 2 ATTORNEY VINCENT: Object to form.
- 3 THE WITNESS: Maybe ask that again. I think I
- 4 missed the second word in your question.
- 5 BY ATTORNEY WANG:
- 6 Q. Do your opinions for these terms depend on one
- 7 another?
- 8 ATTORNEY VINCENT: Object to form.
- 9 THE WITNESS: I don't think so. I think they
- 10 depend on the entire body of the patent to give an
- 11 understanding of what these claim terms mean. Again,
- 12 they're here in one section because they're all related,
- 13 again, maybe focused more around the idea of background
- 14 activity as a claim term than other things.
- 15 BY ATTORNEY WANG:
- 16 Q. Okay. So your opinions for each of these three
- 17 terms are independent from one another?
- 18 ATTORNEY VINCENT: Object to form.
- 19 THE WITNESS: I think they're related just because
- 20 they're all terms from the same written description. So
- 21 there's some dependency there.
- 22 BY ATTORNEY WANG:
- 23 Q. So if one of these terms were found not to be
- 24 indefinite, would that affect your opinions for the other
- 25 terms?

- 1 A. No. I would think about them individually because
- 2 they are different sets of terms, again, related to the
- 3 same general idea.
- 4 Q. Okay. So putting them together in the same
- 5 section, you understand that you have to -- that your
- 6 opinions are separate for each of these terms?
- 7 A. They're related. That's why I put them together
- 8 here.
- 9 Q. Okay.
- 10 Can we look at paragraph 66 of your report?
- 11 A. I'm on that page. Page 23 right now. So I'm with
- 12 you.
- 13 Q. Okay. You seem to be discussing, you know, each
- 14 of these terms and making some opinions. And so you begin
- 15 with -- you say that there's no disclosure to reasonably
- 16 establish what constitutes the, quote (as read):
- 17 Foreground or the, quote, background.
- 18 Do you see that?
- 19 A. That's right. And that's what I continue to do in
- 20 the following paragraphs.
- 21 Q. Okay. Are you making that opinion regarding the
- 22 first term background activity, in claim 1 of the '541
- 23 patent?
- 24 A. That's right. And the other claim terms as well.
- 25 Q. Okay. Did the term -- the first term that we're

- 1 talking about is background activity, correct?
- 2 A. We could talk about that first. Sure.
- 3 Q. But that is the first term, quote, background
- 4 activity, correct?
- 5 A. Yeah. In that heading, level B, that's right.
- 6 Q. The term does not just say background, right?
- 7 A. Yes.
- 8 Q. We can look at claim 1, which is Exhibit 3 of
- 9 the '541 patent.
- 10 A. Okay.
- 11 Q. Do you see that the term "background activity"
- 12 appears three times in claim 1?
- 13 A. Yeah. It looks like three times in claim 1.
- 14 Q. And the word "background" is always followed by
- 15 activity, right?
- 16 A. Yes. All three times.
- 17 Q. It never just says background?
- 18 A. No.
- 19 Q. Is the term "background activity" a technical term
- 20 of art?
- 21 A. Not really. It's pretty vague.
- 22 Q. Have you heard the term before?
- 23 A. I don't recall if I have.
- 24 Q. Do you offer any opinion that it's not a technical
- 25 term of art?

- 1 A. No. Other than my discussion in trying to make
- 2 sense of it in the claim, in the patent itself.
- 3 Q. Do you offer any opinion that it would be a term
- 4 unknown to persons of skill in the art?
- 5 ATTORNEY VINCENT: Object to form.
- 6 THE WITNESS: I think that's what this whole
- 7 section is about, in fact.
- 8 BY ATTORNEY WANG:
- 9 Q. Maybe you can point me to what you're talking
- 10 about. But my question is, do you offer the opinion that a
- 11 person of skill in the art would not know what, quote,
- 12 background activity means?
- 13 A. Again, I think that's what this whole section is
- 14 about. I think we were just talking about paragraph 66.
- 15 And as you can see, I say in paragraph 66, the second
- 16 sentence (as read):
- 17 As I discuss below, each of these terms is
- ambiguous and fails to inform a POSITA -- or
- 19 POSITA -- as to the scope of the claims in these
- 20 patents -- those patents, because there is no
- 21 disclosure to reasonably establish what
- constitutes the foreground or the background.
- 23 Q. I mean, I do see that you have some statements
- 24 about foreground or background, but my question was
- 25 specific to the term "background activity."

- 1 Do you offer the opinion that that term would be
- 2 unfamiliar to persons of skill in the art, and if so, can
- 3 you point me to that?
- 4 ATTORNEY VINCENT: Object to form.
- 5 THE WITNESS: I think it goes without saying that
- 6 it's something that a person wouldn't know, because I'm
- 7 trying to at least establish an understanding of not even
- 8 just what activity means, which is also vague, but I'm
- 9 trying to help define it in the context of background
- 10 activity in this case. And I'm contrasting that type of
- 11 activity, a background activity, in trying to understand it
- 12 in contrast to the foreground activity of which that seems
- 13 to be the only two types of activities that are referred
- 14 to.
- 15 BY ATTORNEY WANG:
- 16 Q. But you say that the specification -- in
- 17 paragraph 72, you say that the specification provides some
- 18 differentiation between background activities and other
- 19 activities, right?
- 20 A. That's right.
- 21 Q. And then that paragraph has some citations to
- 22 the '541 patent, correct?
- 23 A. Yes.
- 24 Q. And, yeah, you cite to column 23, to column 32,
- 25 and column 18. Do you see that?

- 1 A. I see all three of those. Yes.
- 2 Q. And then, in the next paragraph, in 73, you say
- 3 (as read):
- 4 However, the specification provides
- 5 essentially no explanation as to what constitutes
- 6 a, quote, foreground activity.
- 7 Do you see that?
- 8 A. Yes.
- 9 Q. Foreground activity is not a claim term of claim 1
- 10 of the '541 patent, right?
- 11 A. No.
- 12 Q. Is it a claim term in any of the claims that
- 13 you've been opining on?
- 14 A. No.
- 15 Q. In paragraph 73, in the first sentence, why do you
- 16 have quotes over foreground, the word "foreground" alone?
- 17 A. To call attention to it, and also it is a word
- 18 that's in the patent.
- 19 Q. Is the word "foreground" in claim 1 of the '541
- 20 patent?
- 21 A. I think you already asked me that, and we agreed
- 22 that it's not.
- 23 Q. I think I asked you about foreground activity.
- 24 And you agreed that it was not. And so my second question
- 25 was just the word "foreground."

- 1 A. I don't see it in claim 1. No.
- 2 Q. And then, at the first sentence of paragraph 72,
- 3 you do the same thing, right? You put quotes over --
- 4 around the word background, when you say background
- 5 activities. What -- why are you putting quotes around
- 6 background?
- 7 A. To call attention to it, and in this case, it's
- 8 also both in the patent and also in the claim.
- 9 Q. But the claim term is background activity, right?
- 10 A. Sure.
- 11 Q. So why would you just put quotes around the word
- 12 background and not the whole phrase?
- 13 A. Because I'm talking about plural. So I'm not -- I
- wouldn't want to put, quote, background activities, plural.
- 15 So I'm just calling out them, talking about background as a
- 16 word.
- 17 Q. All right. And this may not be what you're
- 18 referring to, but it reminded me of it. But if we come
- 19 across some what you testified earlier this morning,
- 20 Dr. Turnbull about the correction or the quotes, could you
- 21 let me know? Have we come across it yet?
- 22 A. No. I don't think so. But I think it was very
- 23 much along the same lines of what we're discussing here.
- 24 Q. Okay. And then, in paragraph 73, you have a
- 25 quote, a block quote, right, from the '541 patent from

- 1 column 107. Do you see that?
- 2 A. I do.
- 3 Q. And this paragraph, it doesn't use the phrase,
- 4 quote, background activity or the phrase, quote, foreground
- 5 activity. Right?
- 6 A. That's right. It has background and foreground in
- 7 this paragraph.
- 8 Q. Yeah. And it includes the phrase "foreground of
- 9 user interaction" or "in the background of user
- 10 interaction." Do you see that?
- 11 A. I do. We've got that marked in bold here.
- 12 Q. Is that language in claim 1 of the '541 patent
- 13 foreground of user interaction or background of user
- 14 interaction?
- 15 A. No.
- 16 Q. Okay. In paragraph 74, you start to say,
- 17 compounding the confusion, claim 6 of the '613 patent --
- 18 dot, dot, dot.
- 19 Do you see that?
- 20 A. I do.
- 21 Q. And is this intended to support your
- 22 indefiniteness opinions for all three terms in section B?
- 23 A. Yes.
- 24 Q. Okay. My question for you is, how can a dependent
- 25 claim, claim 6 of the '61 [sic] patent, support

- 1 indefiniteness of a different claim, claim 1 of the '541
- 2 patent?
- 3 A. Because they're all discussing the same concept of
- 4 which we referred to earlier, this idea of something in the
- 5 background or a background activity.
- 6 Q. Do you know if that's legally proper?
- 7 ATTORNEY VINCENT: Object to form.
- 8 THE WITNESS: I -- I'm not sure I even understand
- 9 the question, so that probably means it's a legal question.
- 10 BY ATTORNEY WANG:
- 11 Q. Have you ever heard of a claim being found
- 12 indefinite because of a depending claim of another patent?
- 13 ATTORNEY VINCENT: Object to form.
- 14 THE WITNESS: I just don't know the case law
- 15 related to that. I think why I have all this here together
- 16 is I'm trying to look for help within the patent, whether
- 17 it's the written description or the claims, to try to
- 18 understand what these terms that, you know, in my opinion,
- 19 are indefinite are, and I'm struggling to try to find that.
- 20 So I'm referring to things in here, whether it's in claim 1
- 21 of either patent or in claim 6 of the '613, to try to
- 22 understand that.
- 23 BY ATTORNEY WANG:
- 24 Q. Right. But you say "compounding the confusion."
- 25 So you seem to be saying this makes it more confusing or

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- 2 I'm just trying to understand, you know, if a
- 3 person of skill in the art is looking at the '541 patent
- 4 and looking at claim 1, would they really be looking at
- 5 other patents and other claims, dependent claims of other
- 6 patents, as part of what they're looking at?
- 7 A. They certainly could be looking at other patents.
- 8 That's too broad to understand the possibilities of what
- 9 everyone could do. But as we've noted, I guess, at least a
- 10 couple times today, both the '541 and the '613 essentially
- 11 have the same written description. So I would be looking
- 12 at that and trying to assume that they're part of the same
- 13 family.
- And, again, when you just don't have anything
- 15 that's definitive to help with these, you're trying to look
- 16 for any help you can get. And I looked at claim 6, that's
- 17 one of claims in contention, for claim construction. And
- 18 in looking at it, it doesn't help. It -- like I say here,
- 19 it kind of compounds or adds to the confusion because it's
- 20 not specific. It doesn't help any. If anything, it makes
- 21 it worse in trying to understand what the claim terms mean.
- 22 Q. Is there any claim differentiation issue between
- 23 claim 1 of the '541 patent and claim 6 of the '613 patent?
- 24 ATTORNEY VINCENT: Object to form.
- 25 THE WITNESS: I'm not sure I understand the

- 1 question. But I think the answer would be something that I
- 2 have here in paragraph 74, right there in the middle. I
- 3 have been informed that, through a doctrine called claim
- 4 differentiation, independent claims are assumed to have a
- 5 broader scope than the dependent claims.
- 6 And then I can read the rest of it, but that's
- 7 essentially what I was trying to do here based on that
- 8 understanding.
- 9 BY ATTORNEY WANG:
- 10 Q. Right.
- But claim 6 of the '613 patent is not a dependent
- 12 claim from --
- 13 (Clarification by the certified stenographer.)
- 14 BY ATTORNEY WANG:
- 15 Q. But claim 6 of the '613 patent is not a dependent
- 16 claim from claim 1 of the '541 patent, correct?
- 17 A. No.
- 18 Q. And so there wouldn't be any presumption of claim
- 19 differentiation between those two claims.
- 20 A. I think that's a legal opinion or a legal
- 21 conclusion. All I'm saying is that this claim 6 has this
- 22 term in it. I'm trying to understand it. The '541 and
- 23 the '613 share the same specification. So when I'm left
- 24 with so little information to definitively understand the
- 25 claim term, I'm looking for anything that can help, and

- 1 that's why they're all in this section together.
- 2 Q. You mentioned earlier, Dr. Turnbull, that you
- 3 looked through the list of references cited for the '541
- 4 and the '613 patents?
- 5 A. Yeah. I'm sure I reviewed some of them or at
- 6 least looked at -- you know, there's columns and columns of
- 7 information, but I'm sure I looked at them. Yes.
- 8 Q. Okay. But you don't recall any specific reference
- 9 that you analyzed?
- 10 A. No. Not specifically.
- 11 Q. And you don't rely on them in your claim
- 12 construction opinions, do you?
- 13 A. Not per se. Like I said, I remembered one
- 14 article, so the reliance was something like that article
- 15 would just be part of the accumulated skills and experience
- 16 that I have in trying to use all the things that I've read
- 17 or programmed or worked on or discussed with people in my
- 18 whole career to try to inform understanding of what these
- 19 claim terms mean. And some of those references -- again,
- 20 that one paper I think I mentioned specifically could be
- 21 part of that.
- 22 Q. But we would have no idea like what that paper is
- 23 or what part of your opinions it relates to, right?
- 24 A. Oh, well, I can tell you right now. I can just
- 25 scroll to page 1 of the '541 patent.

- 1 Q. Okay.
- 2 A. And I see the one that rings a bell right there.
- 3 It's the Rao paper. I think there's some guides from
- 4 maybe -- I don't remember specifically -- maybe New York
- 5 City University. And, again, it's talking about
- 6 location-based services or LBS. I think it's one of the
- 7 earlier papers that does that.
- 8 But I think it would be really, really quite a
- 9 task for me to try to think of every document or thing that
- 10 I've read or reviewed or, you know, seen a presentation of
- 11 that would inform my opinion. It would be thousands and
- 12 thousands of documents. So it might be unreasonable for me
- 13 to try to include that as things that inform my opinion.
- 14 Q. Okay. Can you point me to what you were talking
- 15 about? You went kind of fast.
- 16 A. Oh, I'm sorry. I hope I didn't go too fast for
- 17 Julie as well.
- 18 Yeah. On page 1 of the '541 patent, there's a
- 19 list in the second column called other publications. And I
- 20 recognized one. I guess it's the one right before it says
- 21 continued. It's authored by Rao, R-a-o. And I just
- 22 remember the paper. Evolution of mobile location-based
- 23 services.
- 24 Q. And do you -- do you know the author?
- 25 A. If I do, I -- you know, it was passing

- 1 conversation at a conference or something like that. It's
- 2 an article in the communications of the ACM, which, I
- 3 guess, is probably the premier journal of computer science.
- 4 I've had an article in that myself maybe a couple years
- 5 before this.
- 6 Q. And looking at this paper, can you point me to any
- 7 part of your opinions that it would be relevant to or that
- 8 informed any specific part?
- 9 A. No. Again, I'm not sure I even went to go look at
- 10 it. I just remember the paper. I probably have it
- 11 somewhere in my digital library. But it's just one of many
- 12 things that, over my career, I would have read because I'm
- 13 curious, and that's my area of research that would just be
- 14 part of something that informed my opinions.
- Again, I've probably read thousands of documents,
- 16 whether it's academic papers, textbooks, again, conference
- 17 presentations, programming books, that all informed my
- 18 opinion.
- 19 Q. Have you reviewed any -- are you familiar with the
- 20 Rao patent or patent with Rao?
- 21 A. No. I'm not familiar with anything else by the
- 22 author off the top of my head. I think there's a couple of
- 23 people, as you might guess, named Rao that are computer
- 24 scientists. This is not Romana Rao, who I think I went to
- 25 school with at Georgia Tech. So there's even a difference

- 1 there.
- 2 Q. Right. And when I say a "Rao" patent, I don't
- 3 know if it's the same person or not.
- 4 My question was, do you recall a patent, you know,
- 5 with an inventor named Rao?
- 6 A. No. I don't. Not off the top of my head.
- 7 Q. Okay.
- 8 Let's turn to the third term that's in claim 6 of
- 9 the '613 patent. Do you see that?
- 10 (Clarification by the certified stenographer.)
- 11 THE WITNESS: Pardon me. I was clearing my
- 12 throat.
- Do you mean the third element that I have in my
- 14 heading level B? Is that what you're referring to?
- 15 BY ATTORNEY WANG:
- 16 Q. Yes, yes. The user of the device.
- 17 A. Okay.
- 18 Q. That term. It's in claim 6 of the '613 patent.
- 19 Do you see that?
- 20 A. Yes.
- 21 Q. Earlier, you mentioned a claim construction order
- 22 that you reviewed. Do you remember anything about the
- 23 claim construction order?
- 24 A. Not specifically. I think, maybe vaguely, Judge
- 25 Payne decided to work with plain and ordinary meaning.

- 1 That may be about all I recall off the top of my head.
- 2 Q. Do you remember what the terms was about or what
- 3 it might be relevant to?
- 4 A. No. I just didn't memorize that.
- 5 Q. Okay. So does that cause you to change any
- 6 opinions or want to offer any additional opinions?
- 7 A. If you want, you could -- you could, you know, put
- 8 it up, and we can look at it. I would say I recall that I
- 9 think that Judge Payne decided to use plain and ordinary
- 10 meaning. And then I think another thing that stands out is
- 11 that was via Samsung; is that correct?
- 12 Q. It may well be.
- 13 A. Oh. That Samsung -- I don't think they used an
- 14 expert in their brief related to claim construction. And
- 15 so it strikes me -- not that I think I should be involved
- 16 in everything or that everything should have an expert, but
- 17 I bet it would have made a difference if there was an
- 18 expert declaration to help establish why the claim term
- 19 might need some help defining it. And I don't think there
- 20 was one that Judge Payne had available to make his
- 21 decision.
- 22 Q. I'm just trying -- and I don't -- if you don't
- 23 have any opinions, I'm not asking you to speculate. But
- 24 I'm just trying to understand, you know, the relevance of
- 25 you looking at that order or if you formed any opinions

- 1 that -- if you formed any opinions based on that. And can
- 2 you say anything beyond what you've said? You remember it
- 3 was Judge Payne order. He said plain and ordinary meaning.
- 4 Do you even remember what term it was about?
- 5 A. Off the top of my head, I just don't. I just read
- 6 too many things recently to remember that. I hope we're
- 7 referring to the same one, in fact.
- 8 Q. Okay. And the order that you're referring to --
- 9 strike that.
- 10 You just said that your recollection was that
- 11 Samsung or the party did not submit an expert declaration,
- 12 right?
- 13 A. That's right.
- 14 Q. And so were there disagreements with Judge Payne's
- 15 order that you had or his findings or reasoning?
- 16 A. I don't think I have anything else to say that I
- 17 already haven't. Again, the lack of an expert, I think,
- 18 you know, doesn't give someone, you know, a full expert
- 19 opinion about the aspect, and it's disappointing that that
- 20 wasn't available to make Judge Payne's decision more
- 21 informed.
- 22 Q. Can you think of anything that Judge Payne got
- 23 wrong or that you disagree with?
- 24 ATTORNEY VINCENT: Object to form.
- 25 THE WITNESS: I just don't recall looking at it.

- 1 BY ATTORNEY WANG:
- 2 Q. And throughout -- of all the terms that you
- 3 discuss in your declaration that -- and we've talked about
- 4 most of them -- do you remember if Judge Payne's order
- 5 relates to any of them or which ones it relates to?
- 6 A. No. I just didn't memorize it. Again, if you
- 7 want me to look at it, we can look at it and see if we have
- 8 some matches here. I'm guessing there's an overlap because
- 9 that's why I was asked to look at it.
- 10 Q. You were asked by counsel to look at it?
- 11 A. Yeah.
- 12 ATTORNEY WANG: Let's go off the record.
- 13 ATTORNEY VINCENT: Okay.
- 14 THE VIDEOGRAPHER: The time is now 12:14 p.m.
- 15 We're going off the video record.
- 16 (Lunch recess taken.)
- 17 THE VIDEOGRAPHER: The time is now 12:49 p.m., and
- 18 we're back on the video record. Thank you.
- 19 BY ATTORNEY WANG:
- 20 Q. Welcome back, Dr. Turnbull.
- 21 A. Thank you.
- 22 Q. Did you have a nice lunch break?
- 23 A. I guess so. How about you?
- 24 Q. I just had a bagel in my office, but not bad.
- 25 Did you have discussions with your counsel during

- 1 the break?
- 2 A. No.
- 3 Q. Let's turn back to the heading -- your heading B
- 4 of the declaration on page 22.
- 5 A. Okay. I'm with you.
- 6 Q. And I want to ask you about the last term. I
- 7 think that's what we were discussing before the break --
- 8 which says (as read):
- 9 The user of the device is directly interacting
- with that application or perceiving any benefit
- 11 from that application.
- 12 Do you see that?
- 13 A. Yes.
- 14 Q. And that's in dependent claim 6 of the '613
- 15 patent, right?
- 16 A. At least in that. Yes.
- 17 Q. But here, that's the only term that -- that's the
- 18 only claim that you list here, right? So as far as we
- 19 know, it doesn't pertain to other claims.
- 20 A. No. That's what we're discussing here.
- 21 ATTORNEY VINCENT: Sorry. I object to the form on
- 22 that question.
- 23 BY ATTORNEY WANG:
- 24 Q. So it may be helpful to take a look at the '613
- 25 patent that's Exhibit 4 that we introduced.

- 1 A. I've got it here, and I'm on the page column
- 2 of Exhibit 4 with claim 6 on it.
- 3 Q. Okay. And so that -- that just says that the --
- 4 this -- the claim, right? The claim term, it comes from
- 5 claim 6. And it says (as read):
- 6 Wherein the one or more processors are
- 7 configured to classify -- dot, dot, dot.
- 8 And then (as read):
- 9 When the user of the device is directly
- interacting with that application or perceiving
- any benefit from that application.
- 12 Do you see that?
- 13 A. That's right. I do see that.
- 14 Q. And the term is the -- really, the last clause of
- 15 claim 6.
- 16 A. Yes.
- 17 Q. Okay. Now, let's focus on the term -- now that
- 18 we've seen the context, the term that you've identified.
- 19 And I just want to focus on the first part of it. It says
- 20 (as read):
- The user of the device is directly interacting
- with that application.
- Do you see that?
- 24 A. I do.
- 25 Q. All right. You don't have an opinion that that

- 1 term is indefinite, correct?
- 2 A. I'm -- I think that's what I'm referring to in
- 3 that subsection B, if that's what your question is. Maybe
- 4 I don't understand the question.
- 5 Q. No. So I want to focus on this term that you've
- 6 identified for construction, and I understand you have an
- 7 indefiniteness opinion, but I just want to understand where
- 8 your argument is.
- 9 And the first part of the term, it says (as read):
- The user of the device is directly interacting
- 11 with that application.
- 12 Do you see that?
- 13 A. Yes.
- 14 Q. And then it says (as read):
- 15 Or perceiving any benefit from the
- 16 application.
- 17 Right?
- 18 A. That's right. That whole phrase.
- 19 Q. Yeah. So let's ignore the "or perceiving any
- 20 benefit from the application." Let's put that aside for
- 21 now.
- 22 My question is, do you have any opinion that the
- 23 first part of that term is indefinite?
- 24 A. Yeah. That's kind of what this whole section is
- 25 about. I'm talking about this is related to background and

- 1 foreground again. And directly interacting leads into that
- 2 or is informed by that as well.
- 3 So I think of that whole phrase in the claim as
- 4 something that I'm saying is indefinite.
- 5 Q. Okay. So, Dr. Turnbull, take a look at
- 6 paragraph 82 of your declaration.
- 7 A. Okay.
- 8 Q. Okay. So here you say (as read):
- 9 Finally, claim 6 of the '613 patent is, in my
- 10 opinion, indefinite because it relies on a user's
- 11 subjective experience.
- 12 Do you see that?
- 13 A. Yes.
- 14 Q. In this paragraph 82 and 83, you're talking about
- 15 the language "perceives any benefit," right?
- 16 A. That's right. Or just benefit, even. Yes.
- 17 Q. Or benefit. Okay. So I understand that you have
- 18 an argument for that.
- 19 But my question is -- for the first part of the
- 20 term where it just says (as read):
- 21 User -- user of the device is directly
- interacting with that application.
- 23 I want to focus you on that part.
- 24 Do you have any opinion or argument that that is
- 25 indefinite?

- 1 A. Yes. I think that's just a couple paragraphs
- 2 above. Let me see here.
- 3 I -- I mention that whole phrase starting -- or at
- 4 least in one place in paragraph 74, and I mention that --
- 5 the middle sentence there, I say in paragraph 74, for
- 6 instance, this suggests there is some other way a user can
- 7 be indirectly interacting with an application.
- 8 And then, in the next paragraph, I'm talking,
- 9 again, about a user directly interacting with the
- 10 application, and I think that follows for a couple more
- 11 paragraphs.
- So I think all of that is discussing what you just
- 13 asked about.
- 14 Q. So the way that I read your opinions was that you
- were relying on claim 6 to make an argument about claim 1,
- 16 about the term that appears in claim 1, but I did not
- 17 see -- and maybe you can point me to something specific
- 18 that, you know, argues that the term that you've identified
- 19 in claim 6, the first part of it, the user of the device is
- 20 directly interacting with that application, is indefinite.
- 21 A. Yeah. Maybe we're just not syncing up here. I
- 22 feel like that is what I read out and I'm discussing in
- 23 paragraph 74, 75, and so on. I'm discussing that
- 24 specifically.
- 25 Q. Okay. So in paragraph 74, you're talking about

- 1 claim differentiation. And then saying something about
- 2 claim 1, right? You're saying that this creates
- 3 uncertainty about interacting with the user as recited in
- 4 independent claim 1.
- 5 Do you see that?
- 6 A. I do.
- 7 Q. Okay. So what about that says that the part of
- 8 claim 6 is indefinite?
- 9 A. Because I'm talking about claim 6. At the
- 10 beginning, I'm trying to understand, and claim 6 adds to
- 11 the confusion so it doesn't help. Claim 6, therefore, is
- 12 indefinite as well. And then that's where I go on for a
- 13 couple of paragraphs -- or three or four paragraphs, in
- 14 fact, discussing that.
- 15 Q. So is it the part of claim 6 that says interacting
- 16 with the user in the user device interface foreground?
- 17 A. I'm mostly focused on what, again, I have detailed
- 18 in quotes and that heading B but also, here, what I have in
- 19 bold. So it's the latter part. So if you were to continue
- 20 reading, that's what I'm discussing.
- 21 (As read):
- The user of the device is directly interacting
- with that application or perceiving any benefit
- 24 from that application.
- 25 Q. Yeah. The way that I read your opinions,

- 1 Dr. Turnbull, was that you understood what directly
- 2 interacting means, but you just -- you raised some argument
- 3 about what interacting means or how that scope is affected
- 4 in view of claim 6.
- 5 But maybe you can just articulate to me what's
- 6 allegedly ambiguous or indefinite about directly -- user is
- 7 directly interacting with that application.
- 8 A. I think it's kind of succinct right there, at
- 9 least beginning in paragraph 74. I think that's what I
- 10 just read. I say, again, more to the ambiguity or the
- 11 indefiniteness. For instance, this suggests that there is
- 12 some other way a user can be indirectly interacting with an
- 13 application without the user perceiving a benefit. So it
- 14 doesn't -- we have this alternative, so it's not really
- 15 specific.
- Then, again, I go on and discuss some various
- 17 other arguments as well that are my opinion about this idea
- 18 of the user of the device is directly interacting with that
- 19 application or perceiving any benefit from that
- 20 application. So I feel like this whole section discusses
- 21 that.
- 22 Q. For claim 1, you're raising the argument
- 23 "indirectly interacting." But when -- the language I'm
- 24 asking you about is "directly interacting." I don't
- 25 believe you have any such argument for directly interacting

- 1 for claim 6 in your report. And if you could point me to
- 2 it.
- 3 A. Again, I think that's what this whole section
- 4 includes. I'm talking about directly interacting in quotes
- 5 in paragraph 75. That's from claim 6. That's what's
- 6 there.
- 7 So maybe I just don't understand the question, or
- 8 it's some rhetorical point or something I'm not
- 9 understanding.
- 10 Q. Okay. In claim 75 [sic], I don't see any opinion
- 11 about directly interacting being indefinite. I think, if
- 12 anything, it suggests that there is some explanation for
- 13 that. So I'm not seeing it in paragraph 75.
- 14 A. I feel like it's there. I'm discussing it. I'm
- 15 trying to make sense of it. And in trying to make sense of
- 16 it, the idea is that -- try to make sense of it is because
- 17 it's not definite. So that's why I'm looking at things in
- 18 the patent to try to understand it. And, again, continue
- 19 into other paragraphs as well.
- 20 Q. Okay. I'm not seeing it in the your report, but
- 21 maybe let me just ask you. What is indefinite about the
- 22 first part of that language?
- 23 (As read):
- 24 The user device is directly interacting with
- that application.

- 1 Explain to me why that's allegedly indefinite.
- 2 A. We don't understand the full breadth of it, and
- 3 that's what I discuss here in the subsequent paragraphs.
- 4 Q. Can you give me an example of what would not be
- 5 understood?
- 6 A. Well, like I read now -- I'll read it for the
- 7 third time -- in paragraph 74, for instance, this suggests
- 8 there is some other way that a user can be indirectly
- 9 interacting with an application without the user perceiving
- 10 a benefit from that application. So we don't really
- 11 understand directly definitively, and then there's this
- 12 contrast in, is there something that's not that or is that
- 13 everything. And then me trying to parse through that,
- 14 either explaining using examples or discussing what I think
- 15 that might mean in terms of directly, indirectly, related
- 16 to, say, foreground and background as well. I feel like
- 17 that's what this whole section is about.
- 18 Q. Okay. So then there's the -- a separate phrase at
- 19 the end (as read):
- 20 Or perceiving any benefit from that
- 21 application.
- 22 And so I understand that you have an opinion for
- 23 that. I was trying to focus you on the first part. But I
- 24 heard in your answer you refer back to that language,
- 25 "perceiving any benefit from."

2 opinion? 3 A. That's in here, too, later on. But I'd say all 4 these paragraphs are part of my analysis and my opinion and 5 my attempt to understand based on what's in the patents 6 themselves, what the claim language means. 7 Q. Let me ask you about the language of the second 8 term in claim 1. 9 A. Okay. 10 Q. Can you read the second term you have in the 11 heading of B, the one that's in '613 patent, claim 1. 12 A. Sure. It's (as read): 13 Classify whether a particular application 14 capable of both interacting with the user in a 15 user interface foreground of the device and at 16 least some internet service activities when not 17 interacting with the user in the device user 18 interface foreground is interacting with the user 19 in the device user interface foreground. 10 Q. Okay. I want to focus you on the middle part of 11 that term that you just read. And it says (as read): 22 Application capable of both interacting with 13 the user in a user interface foreground of the 24 device and at least some internet service	1	So is that the basis of your indefiniteness
4 these paragraphs are part of my analysis and my opinion and 5 my attempt to understand based on what's in the patents 6 themselves, what the claim language means. 7 Q. Let me ask you about the language of the second 8 term in claim 1. 9 A. Okay. 10 Q. Can you read the second term you have in the 11 heading of B, the one that's in '613 patent, claim 1. 12 A. Sure. It's (as read): 13 Classify whether a particular application 14 capable of both interacting with the user in a 15 user interface foreground of the device and at 16 least some internet service activities when not 17 interacting with the user in the device user 18 interface foreground is interacting with the user 19 in the device user interface foreground. 20 Q. Okay. I want to focus you on the middle part of 21 that term that you just read. And it says (as read): 22 Application capable of both interacting with 23 the user in a user interface foreground of the 24 device and at least some internet service	2	opinion?
themselves, what the claim language means. Q. Let me ask you about the language of the second term in claim 1. A. Okay. Q. Can you read the second term you have in the heading of B, the one that's in '613 patent, claim 1. A. Sure. It's (as read): Classify whether a particular application capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user in the	3	A. That's in here, too, later on. But I'd say all
themselves, what the claim language means. Q. Let me ask you about the language of the second term in claim 1. A. Okay. Q. Can you read the second term you have in the heading of B, the one that's in '613 patent, claim 1. A. Sure. It's (as read): Classify whether a particular application capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user in the	4	these paragraphs are part of my analysis and my opinion and
7 Q. Let me ask you about the language of the second 8 term in claim 1. 9 A. Okay. 10 Q. Can you read the second term you have in the 11 heading of B, the one that's in '613 patent, claim 1. 12 A. Sure. It's (as read): 13 Classify whether a particular application 14 capable of both interacting with the user in a 15 user interface foreground of the device and at 16 least some internet service activities when not 17 interacting with the user in the device user 18 in the device user interface foreground. 19 Q. Okay. I want to focus you on the middle part of 19 that term that you just read. And it says (as read): 20 Application capable of both interacting with 21 the user in a user interface foreground of the 22 device and at least some internet service	5	my attempt to understand based on what's in the patents
8 term in claim 1. 9 A. Okay. 10 Q. Can you read the second term you have in the heading of B, the one that's in '613 patent, claim 1. 12 A. Sure. It's (as read): 13 Classify whether a particular application 14 capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device of the device user in the device of the term that you just read. And it says (as read): 20 Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	6	themselves, what the claim language means.
9 A. Okay. 10 Q. Can you read the second term you have in the 11 heading of B, the one that's in '613 patent, claim 1. 12 A. Sure. It's (as read): 13 Classify whether a particular application 14 capable of both interacting with the user in a 15 user interface foreground of the device and at 16 least some internet service activities when not 17 interacting with the user in the device user 18 interface foreground is interacting with the user 19 in the device user interface foreground. 20 Q. Okay. I want to focus you on the middle part of 21 that term that you just read. And it says (as read): 22 Application capable of both interacting with 23 the user in a user interface foreground of the 24 device and at least some internet service	7	Q. Let me ask you about the language of the second
Q. Can you read the second term you have in the heading of B, the one that's in '613 patent, claim 1. A. Sure. It's (as read): Classify whether a particular application capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user interface foreground is interacting with the user in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	8	term in claim 1.
heading of B, the one that's in '613 patent, claim 1. A. Sure. It's (as read): Classify whether a particular application capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user interface foreground is interacting with the user in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	9	A. Okay.
Classify whether a particular application Classify whether a particular application capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user interface foreground is interacting with the user in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	10	Q. Can you read the second term you have in the
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capable of both interacting with the user in a user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user interface foreground is interacting with the user in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	12	A. Sure. It's (as read):
user interface foreground of the device and at least some internet service activities when not interacting with the user in the device user interface foreground is interacting with the user in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	13	Classify whether a particular application
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in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	16	least some internet service activities when not
in the device user interface foreground. Q. Okay. I want to focus you on the middle part of that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	17	interacting with the user in the device user
20 Q. Okay. I want to focus you on the middle part of 21 that term that you just read. And it says (as read): 22 Application capable of both interacting with 23 the user in a user interface foreground of the 24 device and at least some internet service	18	interface foreground is interacting with the user
 that term that you just read. And it says (as read): Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service 	19	in the device user interface foreground.
Application capable of both interacting with the user in a user interface foreground of the device and at least some internet service	20	Q. Okay. I want to focus you on the middle part of
the user in a user interface foreground of the device and at least some internet service	21	that term that you just read. And it says (as read):
24 device and at least some internet service	22	Application capable of both interacting with
	23	the user in a user interface foreground of the
OF and the different control of the	24	device and at least some internet service
activities when not interacting with the user in	25	activities when not interacting with the user in
activities when not interacting with the user in	24	device and at least some internet service

- 1 the user device foreground.
- 2 Do you see that?
- 3 A. I do.
- 4 Q. Do you understand that that whole phrase I just
- 5 read is a noun?
- 6 ATTORNEY VINCENT: Object to form.
- THE WITNESS: I just don't think of it that way.
- 8 It's a phrase.
- 9 BY ATTORNEY WANG:
- 10 Q. But it's talking about like an application capable
- 11 of some functionality, but it's -- the whole thing is
- 12 talking about the application, right?
- 13 A. Yeah. I'll agree it's trying to describe a
- 14 particular application. Yes.
- 15 Q. Okay. And so do you offer any opinion that
- 16 that -- what I've called a noun is indefinite?
- 17 ATTORNEY VINCENT: Object to form.
- 18 THE WITNESS: I guess the whole phrase to me is
- 19 indefinite. Even adding that on doesn't help define it
- 20 specifically.
- 21 BY ATTORNEY WANG:
- 22 Q. What do you mean, adding the whole phrase?
- 23 A. Well, I'm not going to -- I'm -- didn't claim that
- 24 I'm saying that the word "application" is indefinite. I'm
- 25 saying that -- for example, I'm saying the whole phrase,

- 1 that part of the claim, that claim language is indefinite.
- 2 Q. I understand. Yeah. Your opinion is you have
- 3 this indefiniteness argument for the whole claim term,
- 4 which, you know -- at the end, if we look back at heading
- 5 B, right, there's the end, which is, is interacting with
- 6 the user in the user device foreground.
- 7 Do you see that?
- 8 A. In the device user interface foreground, yes.
- 9 Q. Yes. Okay.
- 10 So I see that that last part is an action or a
- 11 verb.
- Do you agree with that?
- 13 ATTORNEY VINCENT: Object to form.
- 14 THE WITNESS: It's just a modifier. It just is
- 15 part of the phrase itself. I'm really not thinking about
- 16 whole phrases.
- 17 BY ATTORNEY WANG:
- 18 Q. The beginning part is, classify whether a
- 19 particular application, you know, dot, dot, dot, is
- 20 interacting with the user, right? So it's talking about
- 21 classifying whether an application is doing this, right?
- 22 A. Yes.
- 23 Q. Okay. So I'm not asking about that right now.
- 24 I'm not. I'm asking you about the middle part, right,
- 25 where it says, an application capable of, and I suggested

1 that this could be considered a verb, you know, a type of 2 application. I'm sorry. I suggested it could be a noun. 3 A type of application that has this property. Do you see that, "capable of"? 4 5 ATTORNEY VINCENT: Object to form. 6 THE WITNESS: I do see that. I think I'm still 7 just not following you. Maybe you -- we're both -- you're 8 thinking about the individual words. I'm thinking about 9 what the phrase means, what the phrase means in the context 10 of the rest of the claim, the whole patent, both in my 11 opinion and from a person of skill, and, I mean, maybe even 12 our difficulty understanding each other here is some 13 indication that it's an indefinite claim term or it doesn't 14 help any. BY ATTORNEY WANG: 15 16 Q. I don't think it does, Doctor. 17 But -- so I'm asking you about that application. 18 An application -- let me read it again. Okay? (As read): 19 An application capable of both interacting 20 with the user in a user interface foreground of 21 the device and at least some internet service 22 activities when not interacting with the user in 23 the user device interface foreground, period. 24 Okay. That's talking about an application or a 25 type of application. Do you have an opinion that that's

- 1 indefinite?
- 2 A. Yeah. I feel like that's still indefinite. And
- 3 part of that is both, A, I'm talking about that whole
- 4 phrase, so I don't think about each of these elements
- 5 individually, or I would have just talked about them
- 6 specifically individually, but also because we have the
- 7 discussion that we talked about earlier. And it's also in
- 8 other paragraphs in my report in this section, about what
- 9 foreground means and a little bit about what even
- 10 interacting means. So I don't really draw any distinction
- 11 in trying to parse out one word or two words in this phrase
- 12 is somehow different than my overall opinion.
- 13 Q. Okay. And where can you point me in your report
- 14 to why the -- what I call a noun or that type of
- 15 application is indefinite?
- 16 A. I think this whole section -- I mean, it's not
- 17 many paragraphs -- discusses it in various ways, whether
- 18 we're talking about applications, what activities are, and
- 19 then, of course, the foreground and background issue as
- 20 well. So it's just all in this section. So the entirety
- 21 of this section covers that.
- 22 Q. Can you be more specific on pointing me to a
- 23 specific paragraph or part of it, because I'm not seeing
- 24 it.
- 25 A. I feel like this entire section discusses these

- 1 issues. I don't know how to be more clear about it. I
- 2 think I put a lot of effort into writing this part and
- 3 trying to explain my opinions and the issues related to the
- 4 claim terms. I don't really have anything else to add off
- 5 the top of my head.
- 6 Q. Okay. Let's look at the last part of this term.
- 7 It says (as read):
- 8 Is interacting with the user in the device
- 9 user interface foreground.
- 10 Do you see that?
- 11 A. Yeah. After the comma, I guess.
- 12 Q. Yes.
- The user is the user of the wireless end-user
- 14 device, right?
- 15 A. I assume so.
- 16 Q. Look at the term "device user interface
- 17 foreground." Do you see that at the end?
- 18 A. Yes.
- 19 Q. Is that a technical term of art? Device user
- 20 interface --
- 21 A. I don't think of it as a common term of art. I
- 22 don't think people use that just chatting about building
- 23 software. No.
- 24 Q. Do you have any opinions that this is an unknown
- 25 term to a person skilled in the art, device user interface

- 1 foreground?
- 2 A. I'm not sure I have a distinction between it being
- 3 unknown and it being indefinite as I detail in my
- 4 discussion after that. If -- I don't know if you're asking
- 5 for a difference between those two words, indefinite versus
- 6 unknown.
- 7 Q. I'm asking you -- unknown, like it would be a term
- 8 unfamiliar to a POSITA.
- 9 A. It's certainly not a common term.
- 10 Q. But you're not saying it would be unknown or
- 11 unfamiliar --
- 12 ATTORNEY VINCENT: Object --
- 13 (Clarification by the certified stenographer.)
- 14 ATTORNEY VINCENT: Object to form.
- 15 You can answer.
- 16 THE WITNESS: If you'll just ask me again. That
- 17 way I make sure I get it right.
- 18 BY ATTORNEY WANG:
- 19 Q. Sure. It's -- let me look.
- 20 But you are not saying that it would be unknown or
- 21 unfamiliar to a POSITA.
- 22 ATTORNEY VINCENT: Object to form.
- 23 THE WITNESS: I think that's what I am -- I am
- 24 saying. I'm not sure I even understand the full breadth of
- 25 what that means. Like has that phrase never been used

- 1 before? Is that what you mean by unknown? I'm not sure
- 2 I've seen it in -- anywhere else. It's -- it's vague. I
- 3 don't think that's -- it's a common term to a person of
- 4 skill. So, I guess, because it is vague and, as I've said
- 5 here, it's indefinite. It's certainly not anything that's
- 6 familiar to me.
- 7 BY ATTORNEY WANG:
- 8 Q. You're saying user interface foreground is not
- 9 familiar to you?
- 10 ATTORNEY VINCENT: Object to form.
- 11 THE WITNESS: It's -- it's not a term or phrase
- 12 that I think I've ever used. We were also, I think,
- 13 talking about device user interface foreground as well.
- 14 BY ATTORNEY WANG:
- 15 Q. So your opinion is that both of them are not
- 16 familiar phrases, device user interface foreground, or user
- 17 interface foreground?
- 18 ATTORNEY VINCENT: Object to form.
- 19 THE WITNESS: Yeah. They're certainly not common
- 20 terms.
- 21 BY ATTORNEY WANG:
- 22 Q. Do you cite any evidence for this idea that
- 23 they're uncommon or unknown?
- 24 A. I guess maybe we're back to two issues there.
- 25 Like I'm trying to prove an negative. Like I didn't go

- 1 analyze the entire internet and every paper I've ever read
- 2 to see if that phrase is in there. But at the same time, I
- 3 have read a lot of things, and I'm familiar with doing
- 4 this, and I understand a person of skill. I exceed that.
- 5 And it's certainly not a common term to me.
- 6 Q. Have you looked at the many references that
- 7 discuss background or foreground cited on the face of these
- 8 patents?
- 9 ATTORNEY VINCENT: Object to form.
- THE WITNESS: I don't know what those references
- 11 are. You'd have to show me what they are.
- 12 BY ATTORNEY WANG:
- 13 Q. Did you do that analysis? Did you look at the
- 14 titles of the patents cited on the face of the '541 or '613
- 15 patents?
- 16 A. Are you asking if I looked at the titles of all of
- 17 the references cited and noticed if they use in their
- 18 titles the word "background" or "foreground"?
- 19 Q. Yes.
- 20 A. If I did that, I don't recall doing that. It's
- 21 possible that I looked at some of them, but sitting here
- 22 today, I just don't have a memory of doing that very
- 23 specific task.
- 24 Q. Okay. So before, you referred to your background
- 25 as a person of skill. So apart from your background and

- 1 knowledge, do you cite any other evidence that supports the
- 2 term user device foreground -- sorry -- "user interface
- 3 foreground or "device user interface foreground being
- 4 uncommon or unknown?
- 5 A. I think the fact that I'm claiming in this report
- 6 that it's part of an indefinite phrase and devote several
- 7 paragraphs to discussing the concept of foreground and, I
- 8 guess, alternatively, background, and that's based on my
- 9 own skills and experience, that kind of by definition I'm
- 10 saying that they're not common terms.
- And, again, all of the things that I've read over
- 12 my history in building applications, computer science,
- 13 architectures, and understanding things like that, that's
- 14 what this is all based on. Simple as that, at least.
- 15 Q. Doctor, when we were looking at your CV, we talked
- 16 about the Headwater case, the last one that appears in your
- 17 CV. Do you recall that?
- 18 A. I do.
- 19 Q. Okay. Do you recall how many terms you offered
- 20 opinions on?
- 21 A. Not off the top of my head. No.
- 22 Q. Does seven sound correct?
- 23 A. I would think that's in the ballpark.
- 24 Q. And do you know if any of those terms were found
- 25 to be indefinite by the court?

- 1 A. I don't know. I'm not sure that's even been
- 2 decided yet. I just don't recall.
- 3 ATTORNEY WANG: Let's look at another exhibit.
- 4 THE WITNESS: All right. It looks like you
- 5 labeled this as Exhibit 5.
- 6 ATTORNEY WANG: Yes --
- 7 THE WITNESS: And I've got it open.
- 8 ATTORNEY WANG: Okay. I'm introducing as
- 9 Exhibit 5, a document entitled claim Construction Order.
- 10 And this is case 2:23-CV-00103 in the case of Headwater
- 11 versus Samsung, docket 118. And this page [sic] is 19
- 12 pages long.
- 13 (Exhibit 5 was presented and subsequently marked
- 14 for identification.)
- 15 THE WITNESS: Okay.
- 16 BY ATTORNEY WANG:
- 17 Q. Okay. Doctor, have you seen this document before?
- 18 A. I'm not sure I have. Let me scroll to the bottom
- 19 here.
- 20 I see that it's also an opinion that Judge Payne
- 21 has signed, but I think the one we were referring to
- 22 earlier had a different page count, so I don't think that's
- 23 what this one is. And I, again, just don't have a memory
- 24 of what the case numbers are to differentiate them.
- 25 Q. Okay. Let me first ask you. Is this the case

- 1 that you submitted a declaration in regarding claim
- 2 construction?
- 3 A. I'm not sure. I just don't remember the number.
- 4 The patent numbers look familiar there, but, you know, I
- 5 see a lot of numbers.
- 6 Q. Maybe this would help. If you turn to page 9 of
- 7 the document I just sent. Do you see there's a section on
- 8 the level of ordinary skill in the art?
- 9 A. I do see that. Yes.
- 10 Q. And do you see here that -- text "Samsung
- 11 asserts," and then it quotes your name.
- 12 Do you see that?
- 13 A. I do. I see it says Turnbull declaration.
- 14 Q. Okay. So does this refresh your recollection that
- 15 this is the case that you submitted a declaration in?
- 16 A. I guess it must be. Again, I just don't remember
- 17 the number, but I think it's the only other case related to
- 18 these matters that I'm involved in. So I'm guessing that's
- 19 what this is.
- 20 Q. Okay. I want you to look at page 2 of this
- 21 document at the top of it. And in the core it says, the
- 22 parties present five disputes about claim scope. And then
- 23 it says --
- 24 A. I see that on page 2.
- 25 Q. Right. And it says that, for each, Samsung

- 1 contends the associated term is indefinite, whereas
- 2 Headwater asserts that the term has an ordinary, customary
- 3 meaning that should apply.
- 4 Do you see that?
- 5 A. I do.
- 6 Q. And then let me turn your attention to the last
- 7 page. And do you see that the court has its constructions?
- 8 A. The last page of the entire document?
- 9 Q. Yes.
- 10 A. Oh. I do. It looks like page 19 has a heading
- 11 that essentially is the first thing that says conclusion.
- 12 Q. Right.
- And none of the terms are found indefinite.
- 14 Right?
- 15 A. I don't see them marked as such here.
- 16 Q. In all of these Headwater cases, have you ever
- 17 offered an opinion other than indefiniteness?
- 18 A. I'm not sure. I just don't recall.
- 19 Q. And at least in this case, the court did not find
- 20 any terms indefinite, right?
- 21 A. I'm not sure. When we were discussing something
- 22 earlier, I thought you said that my work on what I guess is
- 23 this case -- I talked about seven terms. I only see five
- 24 rows here. So I don't know if there are two someplace else
- 25 or I misremembered what you said or you meant something

- 1 else.
- 2 Q. Or Samsung withdrew those terms?
- 3 A. Oh, yes. See, I just don't know. This is the
- 4 first time I've seen this document, to my memory.
- 5 Q. Okay. All right. So I want to be clear that you
- 6 had referenced a claim construction order before, but this
- 7 is not the one that you reviewed.
- 8 A. No. I don't think so. Because I think one of the
- 9 takeaways from the other one was that Samsung didn't have
- 10 an expert, and this one, as you pointed out to me -- I'm
- 11 the expert.
- 12 Q. Right.
- Let me also call your attention to page 14 of this
- 14 order.
- 15 A. I'm on page 14.
- 16 Q. Okay. Do you see in the middle of this page the
- 17 court says, this phrase is not indefinite? Do you see
- 18 that?
- 19 A. It's at the beginning of the second full
- 20 paragraph?
- 21 Q. Yes.
- 22 A. I see that sentence. Yes.
- 23 Q. And then it says, for one, the court agrees that
- 24 Dr. Turnbull's declaration on this term is conclusory.
- 25 A. Okay. I see that.

- 1 Q. Okay.
- 2 All right. Let's turn back to your declaration in
- 3 this case, Doctor.
- 4 So in this case, you're opining about four terms,
- 5 and your opinion is that they're all indefinite?
- 6 A. That's right.
- 7 ATTORNEY WANG: I have no further questions. I
- 8 will pass the witness.
- 9 EXAMINATION
- 10 BY ATTORNEY VINCENT:
- 11 Q. Just one quick question, and it relates to what we
- 12 just talked about earlier on in the deposition. At least
- 13 the transcript that I had, the answer was ambiguous. So I
- 14 just want to clarify.
- 15 Apart from Exhibit 5, you did review, to prepare
- 16 for your deposition, another claim construction order in
- 17 another Headwater case, correct?
- 18 A. That's right. The one I think we referred to a
- 19 couple of times today.
- 20 Q. The answer that you gave earlier, the way it was
- 21 transcribed was ambiguous as to whether or not you had
- 22 actually looked at it or not, so I just wanted to make that
- 23 clear.
- 24 A. Oh, I apologize. I did review it.
- 25 ATTORNEY VINCENT: And I have no questions.

1	ATTORNEY WANG: I just have a couple follow-ups.
2	FURTHER EXAMINATION
3	BY ATTORNEY WANG:
4	Q. Do you have that available to provide or no?
5	ATTORNEY VINCENT: Object
6	THE WITNESS: I don't. I kind of getting
7	everything off my screen, and I buried it. So I wouldn't,
8	you know, have anything unfair available.
9	BY ATTORNEY WANG:
10	Q. Okay. And since your counsel, you know, refreshed
11	your recollection that you reviewed, I think I tried to
12	understand it, if you had any opinions about it, if you
13	want to say anything about it. And so apart from what
14	we've discussed, is there anything that you want to say
15	about it?
16	A. I don't think I have anything to add beyond what
17	I've already said.
18	ATTORNEY WANG: Okay. I have nothing further.
19	ATTORNEY VINCENT: Nothing further.
20	CERTIFIED STENOGRAPHER: Robert, I'll get your
21	transcript order on the record, please.
22	ATTORNEY VINCENT: Let's do what's the normal
23	turnaround?
24	CERTIFIED STENOGRAPHER: Two weeks.
25	ATTORNEY VINCENT: That's fine.

1	CERTIFIED STENOGRAPHER: Did you want an
2	uncertified rough transcript in the interim?
3	ATTORNEY VINCENT: Yes, please.
4	CERTIFIED STENOGRAPHER: Anything else on the
5	record?
6	THE VIDEOGRAPHER: Did you want a copy of the
7	video as well, Robert? I'm sorry.
8	ATTORNEY VINCENT: Yes, please. Sorry.
9	THE VIDEOGRAPHER: Okay. All right. With that,
10	the time is sorry.
11	Anything else before we go off the record?
12	ATTORNEY WANG: No.
13	ATTORNEY VINCENT: Not from me.
14	ATTORNEY WANG: Not from Headwater.
15	THE VIDEOGRAPHER: All right. With that, the time
16	is now 1:33 p.m. We're going off the video record.
17	(Proceedings concluded at 1:33 p.m. PDT.)
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1	CERTIFICATE OF REPORTER
2	000 I, the undersigned, a Certified Shorthand
3	Reporter, Licensed by the State of California, being
4	empowered to administer oaths and affirmations remotely
5	pursuant to Section 2093(b) of the Code of Civil Procedure,
6	do hereby certify:
7	That the foregoing proceedings were taken remotely
8	before me at the time and place herein set forth; that any
9	witness in the foregoing proceedings, prior to testifying,
10	were placed under oath; that a verbatim record of the
11	proceedings was made by me using machine shorthand which
12	was thereafter transcribed under my direction; further,
13	that the foregoing is an accurate transcription thereof.
14	I further certify that I am neither financially
15	interested in the action nor a relative or employee of any
16	attorney or any of the parties.
17	Further, that if the foregoing pertains to the
18	original transcript of a deposition in a Federal Case,
19	before completion of the proceedings, review of the
20	transcript [] was [X] was not requested.
21	IN WITNESS WHEREOF, I have this date subscribed my
22	name.
23	DATED: 9/6/2024
24	JULIE RUMSEY, CSR No. 14144
25	
1	

				August 30, 2024
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